

Manufacturers Record

Exponent of America



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Baltimore, Md.
JULY 13, 1922

Illinois Murders a Warning to the Nation Against Radicalism in Labor Unionism.

The awful crime committed at Herrin, Ill., in the murder of 40 or more innocent men developed a fiendishness perhaps almost without parallel in human history. A young woman with a baby in her arms, so the report says, placed her foot on the body of one of the innocent men who had been shot down—shot merely because he was willing to work—and looking down into his face, covered with blood, and hearing his begging cry for water, said: "I'll see you in hell before you get any water."

On the road where six men tied together had been shot down as though they were mad dogs, burning with thirst they begged for water, and received from both men and women only jeers for their cries.

These are but typical illustrations out of dozens of equal horror reported from a spot where people seem to have given the world a new conception of the awful degradation of which men and women alike can sink under the leadership of hell.

The situation at Herrin, shocking beyond all power of words to express, marks a new phase of human depravity. It is indicative of the spirit which has been created in many thousands of people by the bitter denunciation by labor leaders of the right of men to work untrammelled by radical unionism. It is indicative of the spirit that is abroad through the teaching of those who denounce our courts and who gloatingly violate our laws.

If ever a nation needed to heed a warning which is but a sign of the times, this nation needs at the present time to be called to its senses and face the facts.

We need to learn that the domination of radical unionism can give Bolshevism a long lead and still beat it in the race to desperate criminality.

We need to learn that the independence of this country from union domination and from lawless men, whether of high or low degree, who violate laws and denounce courts, can only be safeguarded by an awakened conscience of the American people stirred to its deepest depths by the black horror which Illinois has let loose upon our country. That horror is but the natural and inevitable harvest of the seed that has been sown in hatred by radical leaders of labor unions against independent or open shop men. It is but the inevitable harvesting of the seed sown by every man who violates law or who assumes to denounce courts and all legislatures or who gives unbridled rein to his own desires regardless of statute or moral law.

The law breaker is a criminal.

Law breaking is anarchy; and the fruit of anarchy is death to the nation.

Any man who has wilfully violated the laws of his land is to the extent of his influence responsible for bringing about the lawless spirit the fruit of which is seen in the situation in Herrin; and the same harvest is being gathered in every part of our land where murders are rampant and murderers go free.

The teaching of radicalism in labor unionism and the hatred thus engendered for all open shop or independent men leads inevitably in final fruition to the spirit which found vent in the diabolism which was rampant when hell broke loose and set its stamp of approval upon the Illinois atrocities.

In this issue is published a remarkable symposium of editorial views from many leading papers of all sections.



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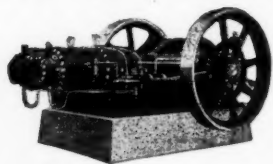
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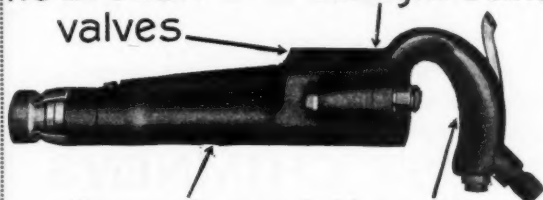


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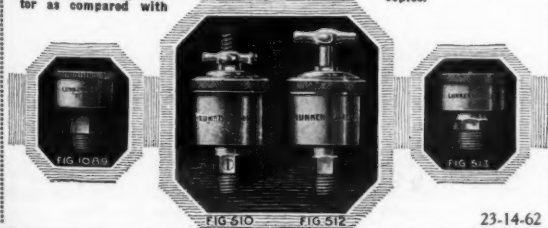
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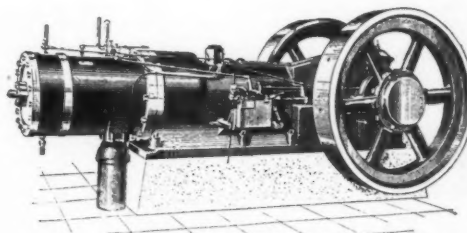
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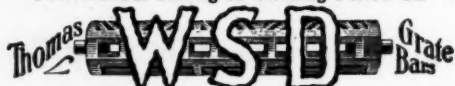
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Whitlock Rope Makes the Oil Hose Behave

FEW articles of Marine gear are more difficult to handle than the cranky oil hose which tries to writhe out of hand when the pumps apply their tremendous pressure. But Whitlock Manila can stand the strain. It is being used successfully by great American Oil Companies everywhere for this exacting task.

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THE UTMOST IN ROPE VALUE.

WHITLOCK Manila is positively guaranteed to give satisfactory service. It costs no more and lasts longer.

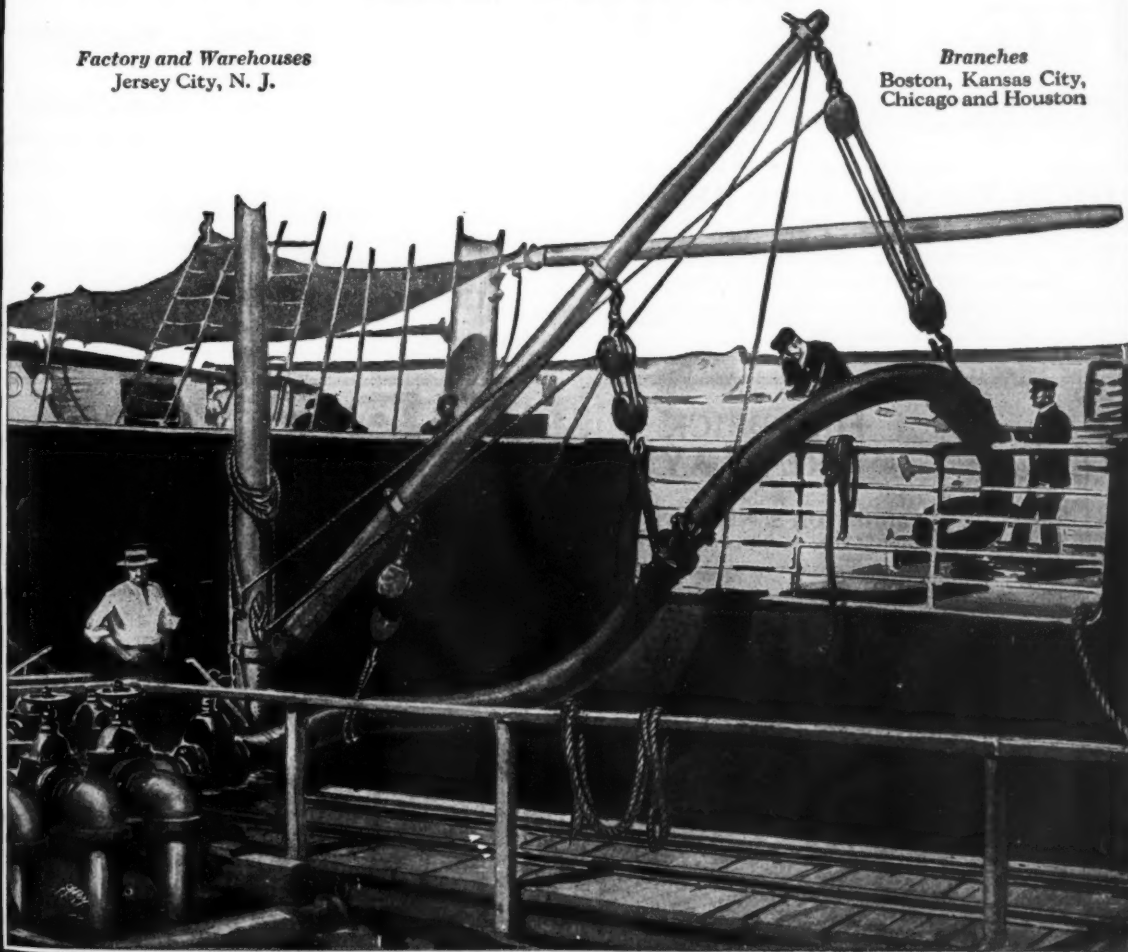
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without reservation, to the production of the finest quality piston ring ever made. Actual use of the

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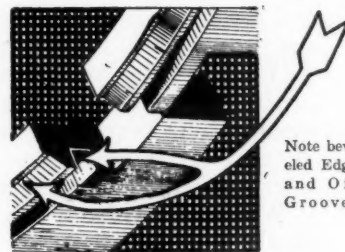
will convince you that this is not too sweeping a statement. See the BEVELED EDGE and OIL GROOVE of the Universal ONE-PIECE PISTON RING. Forced lubrication prevents foul plugs. The beveled top edge and central groove keeps oil from the combustion chamber—reduces carbon.

Jobbers & Dealers: Write for the details.

UNIVERSAL MACHINE COMPANY

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Note beveled Edge and Oil Groove.

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JOINTLESS FIRE BRICK CO
OFFICE and FACTORY 1130 CLAY ST. CHICAGO
Manufacture Brick in Firebrick China for Domestic Markets

Taming the Coal Eater

Read this if you have a hungry furnace

IF your furnace develops an insatiable appetite for coal and still fails to keep your house warm, that's a sign that much of the fuel you feed it is wasted.

It will pay you to locate this waste and apply the remedy—simple cures which mean a warmer house and often a saving of one-quarter of the season's fuel bill.

Bare pipes waste fuel

As a starter take this fact, not generally known: Under average house-heating conditions a bare steam pipe 50 feet long and 3 inches in diameter loses heat equivalent to 4 tons of coal a season.

And that says: cover the pipes—wherever they are open to attack by cold air.

If your house is still "on paper" or in the early stages of building, cover the pipes which run between the walls and under flooring as well as those exposed in the cellar. If you are already living in the house, cover all accessible pipes. Cover the furnace body too.

But any covering will not do. To be efficient a covering must be so constructed that it prevents air from circulating through it and carrying off heat. If there is already some

kind of covering on your pipes, here's a test—if your cellar is comfortably warm, the covering is not efficient. That means investigate.

Improved Asbestocel, the real heat insulation

Johns-Manville Improved Asbestocel keeps heat in because air cannot circulate through it. It is built in a series of closed cells, which act as baffles. See panel at right.

This unique construction makes Asbestocel the best household insulation on the market. Yet it costs about the same as air cell coverings which do not combine its features of high efficiency, neat appearance and long life.

For economy's sake, insulate with Improved Asbestocel.

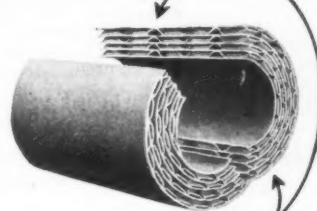
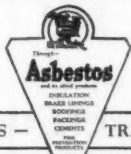
Other ways to save coal

Clean the flues and heating surfaces of soot several times a season. Clean out ashes and clinkers frequently. Soot on flues and ashes around the fire-bed waste coal because they keep heat away from the boiler. For complete combustion put just a little coal at a time on the fire.

Johns-Manville has prepared a booklet explaining these principles. Send for it if you want smaller fuel bills.

JOHNS-MANVILLE Asbestos

PIPE COVERINGS — PACKINGS — CEMENTS — POWER SPECIALTIES — TRAPS



Insist on this construction

Note that the corrugations run both lengthwise and crosswise—instead of lengthwise alone, as in other coverings. Insist on closed cell construction as your insurance for maximum heat saving. Ask for

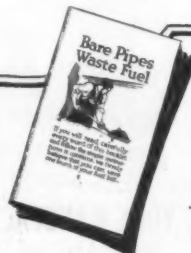
Johns-Manville Improved Asbestocel

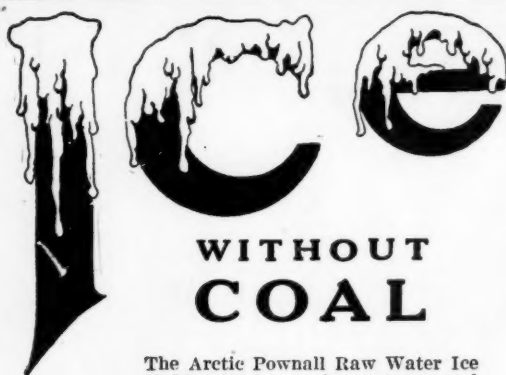
To the Trade: Johns-Manville has just issued a booklet which tells how to sell and apply heat insulation. Send for a copy and get ready for inquiries.

JOHNS-MANVILLE Inc.

Madison Avenue at 41st Street, New York City
Branches in 57 Large Cities
For Canada:
Canadian Johns-Manville Co., Ltd., Toronto

Send for this book. It will help you get more out of your coal bin, whether or not you're ready for Johns-Manville Insulation.





WITHOUT COAL

The Arctic Pownall Raw Water Ice Making System makes pure, crystal clear ice, using any motive power.

The ice produced is superior to that made by any other system.

Every block is uniform in size and weight, and the tops are absolutely level.

This system also requires less labor than any other; and while the initial cost is higher, the cost of making ice with this system is far less than any other, consequently greater returns on the investment are assured.

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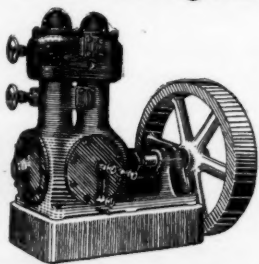
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Machine to meet every
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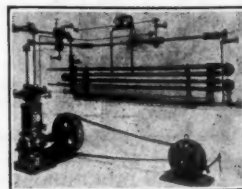
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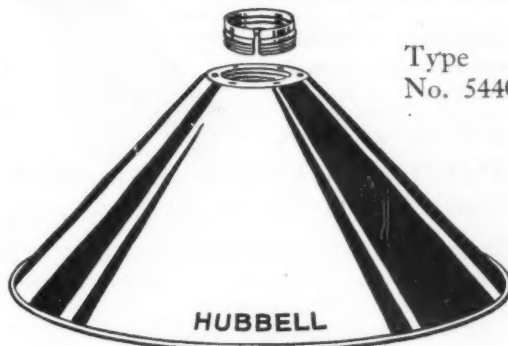
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METAL Deep Cone Reflectors, Green outside, White inside; equipped with Hubbell Contractile Collar fitting standard socket shells, or with metal strap and contracting screws for porcelain sockets.

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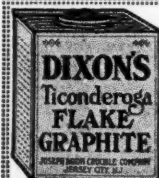
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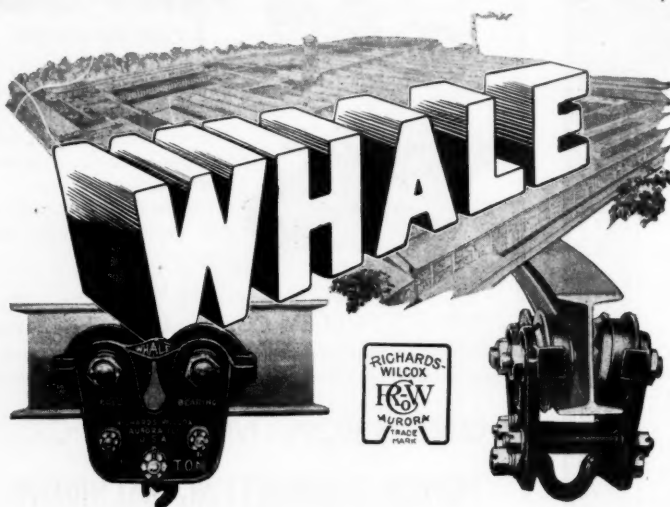
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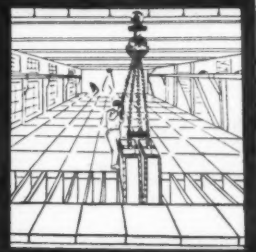
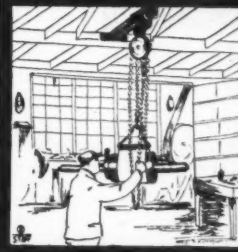
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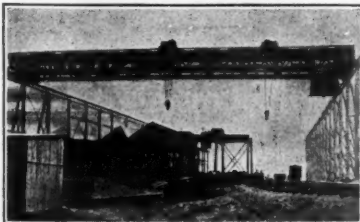
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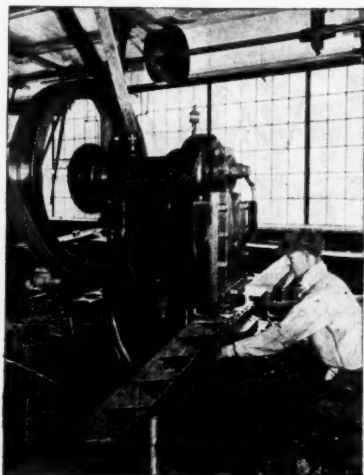
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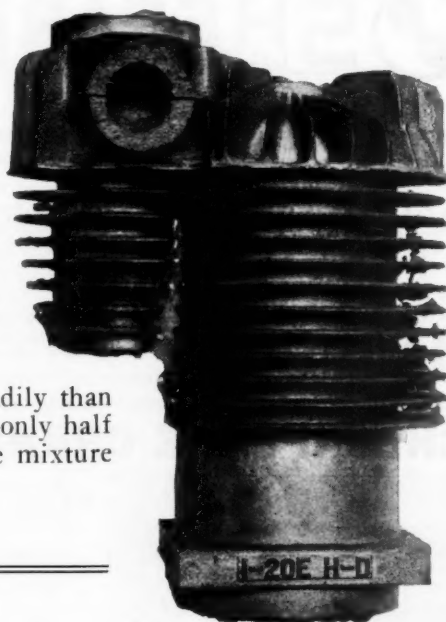
Mayari Pig Iron In Motor Cycle Castings

A prominent foundry finds an addition of Mayari Iron to the mixture invaluable in the manufacture of air-cooled motor cycle cylinders.

Cut here shown was made from an unretouched photograph of one of these castings just as it left the mold, and gives an idea of the thinness of the fins and the general cleanliness of the casting.

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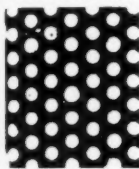
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UNFINISHED RIVER PROJECTS CHECK GREAT FLOW OF TRAFFIC



A derrick boat at Memphis, Tennessee, on the Mississippi River, transferring 75 carloads of Jones & Laughlin steel pipe from river barges to railroad cars for delivery into the Southwestern oil fields. The barges arrived at Memphis eight days after they left Pittsburgh. The distance by river is 1,200 miles.

DURING the nine months the Jones & Laughlin Steel Company's water transport service has been operating, many 1,000-ton barges of steel pipe, wire nails, barbed wire, wire fence, tinplate, blackplate, and structural steel have been delivered on schedule, without accident or delay, to Huntington, W. Va., Louisville, Ky., Evansville, Ind., St. Louis, Mo., Memphis, Tenn., and New Orleans, La. The cargoes in some instances have been destined for customers within the above cities; in others, have been transhipped by rail to interior points long distances from the rivers.

By reason of the economies in transportation costs it brings about, the effect of the service has been to widen the circle in which this company and its customers and in turn their customers are enabled to do business. The benefits have extended through to the ultimate consumers on the farms, in the building trades and the industries of the South, the Southwest and the West.

Unfortunately, this river service must now be curtailed for several months.

There are no locks and dams in the lower Ohio.

During dry weather the result is a break in the connection between the Ohio and the Mississippi, as without these installations enough water to float laden tows is never assured.

The J & L June tow went through this stretch of open river on the traditional "June rise". It

was 104 feet wide and 590 feet long—the largest tow of steel products ever shipped out of Pittsburgh. Barges were conveyed to Louisville on the Ohio, and to St. Louis, Memphis and New Orleans on the Mississippi.

The July, August and September tows can go down the Ohio only as far as Louisville, between which point and Pittsburgh the slackwater system is nearly enough completed to enable loaded barges to be handled with some degree of safety during periods of low water.

It is the conviction of men experienced in water transportation, that if the promises made by Congress in 1910, had been kept, namely that by 1922 the Ohio should be canalized from source to mouth, the upper Mississippi deepened, and other work carried out as planned by army engineers, there would be today a great stream of traffic moving in both directions all along our "trunk line" river system, supplementing and relieving our railroads. Huge tonnages of products made, mined or grown in the North and Northwest would be going down river and passing the agricultural, mineral and manufactured products of the South and the Southwest up-bound to fresh markets and wider distribution in the North.

If development to the utmost degree of utility of reliable, low-cost water transportation facilities is worth anything to agriculture, industry and trade; if by the coordination of river, rail and highway, we may have a system for distribution unequalled by any other nation, it behooves all of us to press upon Congress for the earliest possible redemption of its promise of 1910.

Let us not only bring the subject to the attention of our present representatives, but let us ask the candidates seeking election to the House and Senate to give the question study that they may state how they stand with respect to speedy completion of our wonderful inland waterways transportation system.

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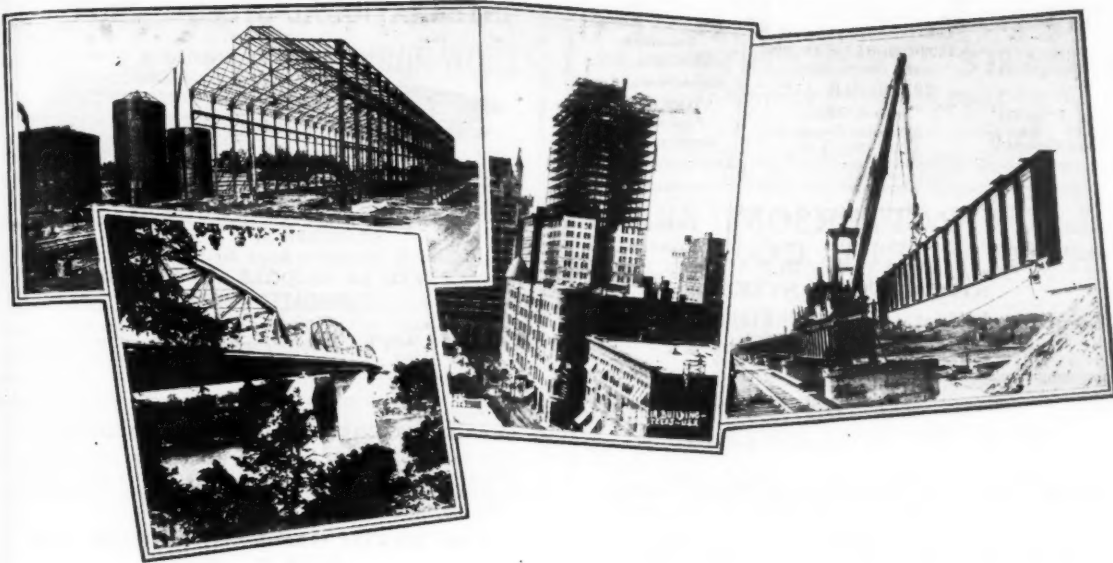
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Because of its uniformity and its long-wearing qualities, "Perfect" Wire Cloth has demonstrated to thousands that it is by far the most satisfactory and economical for every screening purpose. Our Screen Book is mailed on request.

The Ludlow-Saylor Wire Co. ST. LOUIS, MO.

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ALL GRADES OF WIRE CLOTH MADE OF ALL KINDS OF WIRE
WIRE CLOTH
WIRE NETTING WIRE FENCING
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THE NEW JERSEY WIRE CLOTH COMPANY
MAIN OFFICE: TRENTON, NEW JERSEY

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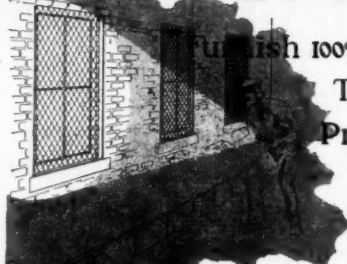
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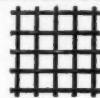


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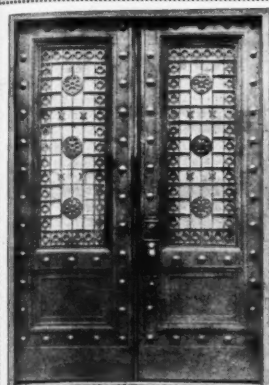
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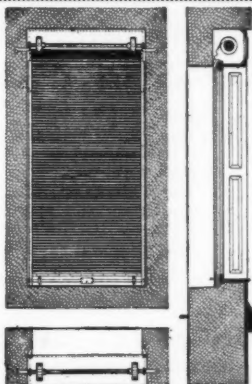
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Prices Most Reasonable.

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Work Installed Anywhere

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PLATE WINDOW MIRROR
SKYLIGHT WIRE FIGURED
COPPER SASH AND BARS

Founded 1864

HIRES-TURNER GLASS COMPANY

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Uniform in Quality

MADE by accurate, machine methods,
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Standard for Forty-six Years

Rolling STEEL Doors

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Used in warehouses, freight and car sheds, and industrial plants everywhere. Easily operated and maintained. Order now for Fall deliveries.

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The Beautiful Blended Tones of KINGSPORT ARTISTIC BRICK

Are obtained solely by scientifically burning the wonderful clays in our deposits. No chemicals or foreign ingredients are used whatever.

The wide range of color tones blend harmoniously and give the finished structure a distinctive individuality that enhances the value and salability of the building.

Write for samples and prices
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"IF IT'S BRICK, WE HAVE IT"

Established 1910

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Indiana Limestone—Hollow Tile—Face Brick—"Fisklock" Brick

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We help you build NOW

WRITE us for our delivered prices on TILE for Floors or Walls, of any kind.

We can ship promptly CERAMIC, QUARRY or FLINT Floor TILE, Glazed or Matt Finish Wall TILE and Trim, in car lots or less.

State Quantities wanted.

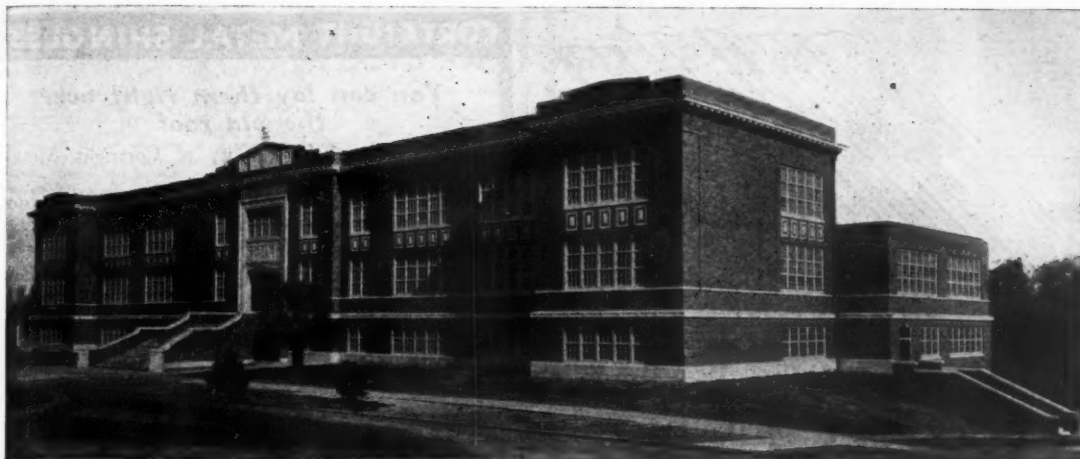
SOUTHERN MOSAIC TILE CO. Candler Bldg. ATLANTA, GA.



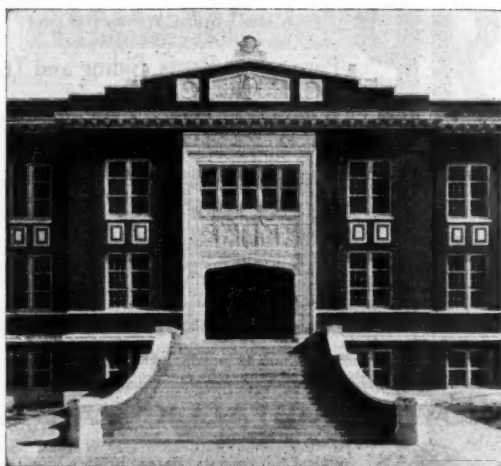
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Incorporated 1884
GEO. S. BEIMDIEK,
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Walker D. Willis, Architect
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Detail of Main Entrance

Imagine this building without its terra cotta trim! Would it be as distinctive and inspiring?

The Pensacola High School splendidly illustrates the natural harmony between brick and Atlanta Terra Cotta.

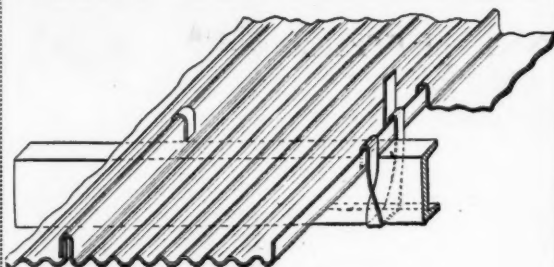
All of the trim and ornament from base course to copings, including the beautiful entrance with its symbolic panels, is of white matt glazed terra cotta. It is the terra cotta that gives definition and richness to the structural lines of the building.

Atlanta Terra Cotta Company

Citizens & Southern Bank Building

Atlanta, Georgia

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Made in Number 16 to 28 Gauge, Painted or Galvanized

Can be applied on iron purlins without nailing, riveting or puncturing the metal.

The Ideal Fireproof Roof Covering for Factories, Foundries, Warehouses, Railroad Sheds, Auditoriums, Public Buildings, etc.

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Metal Ceilings, Metal Shingles, Metal Spanish Tile, Metal Garages, Portable Buildings, Skylights, Ventilators, Shelving, Etc.

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All Forms of Roofings
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IMPORTERS AND JOBBERS
METALS, TIN PLATES AND ROOFING
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CORTRIGHT METAL SHINGLES.

*You can lay them right over
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—And as to the durability of Cortright Metal
Shingles—

*Some laid 33 years ago
are still tight.*

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Philadelphia - Chicago



VENDOR SLATE CO.
INCORPORATED
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Largest Shippers of Roofing Slate in The World

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A Rust and Corrosion-Proof
Building Material for

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LUDOWICI-CELADON COMPANY

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For Preserving Railroad Cars, Wagons, Agricultural Implements, Barns, Bridges, etc., has no equal. Fine grind and uniformity of color guaranteed.

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for Modern Buildings*

Offices, Industrial Plants
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"OLD HOOK 'ER" GETS LOTS OF FUNNY LETTERS

From all over the world.

But the funniest letters of them all are those from the Professional Ad Writers telling us what a "Bungling," "Punk," "Ridiculous," "Wasteful," "Injurious," and so forth, Ad Writer we have to prepare our "copy."

And offering (for a consideration) their own "Expert" service, which will be sure to draw us business.

Well, We Know Our Advertisements Are "Bum."

We used to write the other kind because they were so easy to write.

But to write a "Bum" ad that all the readers of the paper will turn to see

"If Ridgway Is As 'Bum' This Week As Last Week"

Well that is another kind of a job, try it once and see. By the way this has just come in from Wellesley Hills. Mr. Babson is some advertiser himself.

Dear Sirs:

Let Me Congratulate You On the Fine Advertising You Are Putting Out.

Yours truly,

Roger W. Babson.

All of which of course is another one of those "Bum Ads of that man Ridgway."

It's a wonder anyone can be led by "such stuff" to

"HOOK 'er to the Biler"

THE RIDGWAY & SON CO., Coatesville, Pa.

Elevator Makers to Folks Who Know



Direct Acting



Double Geared



Elevator in Large Soap Factory in Jersey City



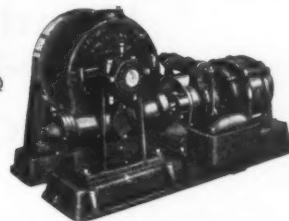
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ELEVATORS

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PASSENGER FREIGHT DUMBWAITERS HAND POWER
A Complete Line ELECTRIC
We can change your hand power to electric

Westbrook
ELEVATORS



Single Wrap Traction Type Machine

The Westbrook is the result of careful study and tests of competent engineers.

FOR PASSENGER AND FREIGHT SERVICE

WESTBROOK ELEVATOR MANUFACTURING CO., Inc.
DANVILLE, VIRGINIA

ELEVATORS MOFFATT MACHINERY MFG. CO.

HAND—BELT—ELECTRIC
AND HYDRAULIC

MACHINISTS AND FOUNDERS
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T. FRANK WILHELM, Manager

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Manufacturers of

Passenger and All Types Freight Elevators

Factory and Main Office

Greensboro

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AMERICAN
ELEVATORS

Built
by

AMERICAN ELEVATOR
and MACHINE CO.
INCORPORATED
LOUISVILLE, KY.

Standard for nearly half a century.

Passenger and Freight.

All Powers.

TURNER ELEVATORS

K. C. ELEVATOR MFG. CO.
(Established 1881)

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WE BUILD FREIGHT ELEVATORS AND CONVEYERS

DUMB WAITERS
HAND HOISTS
SIDEWALK LIFTS

AUTO LIFTS
A Specialty
SAFETY LOCKS

ATLANTA ELEVATOR COMPANY
ATLANTA GEORGIA
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Part of large Housing development at Newburgh, N. Y., Stained with Cabot's Creosote Stains and Old Virginia White.
Ludlow & Peabody and C. H. Sparry, Architects, N. Y.

Hundreds of Housing Projects

all over the country, and abroad, have been colored and preserved with

Cabot's Creosote Stains

"50% Cheaper Than Paint"

"Creosote is the best wood preservative known," and Cabot's Stains are made from pure refined Creosote. The colors are pure, strong and unfading, and they bring out the beauty of the wood instead of hiding it as paint does. They are quickly and easily applied.

Send for samples of stained wood and full information

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Maple Flooring Is THE BEST Factory Flooring

Where hard usage puts flooring to the supreme test,—in factory, warehouse or mill, *Maple Flooring* is always preferable.

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YELLOW PINE

HARDWOODS, CYPRESS, WEST COAST LUMBER
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WE SPECIALIZE IN OIL FIELD TIMBERS AND CARRY IN STOCK DERRICKS & RIGS.
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TIMBERS OUR SPECIALTY
We also carry a full stock of
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Distributors:
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THE BLACK RIVER CYPRESS COMPANY
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WE RECOMMEND OUR

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THE COST IS NOMINAL. NO EXPENSE FOR KILNS. NO FIRE RISK.
WRITE FOR PRICES, FREIGHT AND FULL PARTICULARS.
HIGHEST TEST GUARANTEED.

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*The Standard of
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Our eighteen years of experience qualify us to consult with you on every creosoting need. Write for information or quotations.

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Plants—Manville, N. J.; Paterson, N. J.; Rome, N. Y.; Livingston Manor, N. Y.; Toledo, Ohio; Indianapolis, Ind.; Bloomington, Ind.; Russell, Ky.; Marion, Ill.; Kansas City, Mo.; Springfield, Mo.; Hugo, Okla.; Shreveport, La.; De Ridder, La.; Bogalusa La.; Brunswick, Ga.; New Haven, Conn.

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HAS NINE MILES OF EVERLASTING CREOSOTED PINE WHARVES

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Eastern Office:

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CREOSOTED LONG AND SHORT LEAF SOUTHERN YELLOW PINE

Structural Timbers, Cross Ties
Crossarms, Fence Posts
Piling, Poles
Wood Blocks
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We make shipments by rail or water. Inquiries given prompt attention. Estimates gladly furnished.

Give us an opportunity to quote on your requirements.

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Plant at New Orleans, La. Plant at Louisville, Miss.
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Center-bored Factory Columns, long-leaf yellow pine, a Specialty.

We furnish at least three-fourths of the South's requirements of Cotton-mill Columns.

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PORT WENTWORTH, SAVANNAH, GA.
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Private Wharf on Savannah River Capacity 50,000,000
Feet B. M. Per Annum
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Successor to Carbolineum Wood Preserving Co.

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NEW YORK, N. Y.

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GULFPORT, MISS.

Send us your inquiries direct when in the market for creosoted materials of any description, or desire figures for preparing estimates.

SOUTHERN CREOSOTING COMPANY, Ltd. SLIDELL, LA.

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Twenty-eight miles from New Orleans, La., surrounded by the finest timber lands in the South. Facilities for shipping by water and rail.

Creosoted Ties, Telegraph Poles, Cross-Arms
Timber, Piles and Paving Blocks
Capacity 22,000,000 feet per annum.

A. B. C. Code used.

Cable Address, Creosote, Slidell, La.

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BLOCK FLOORS

FLOORS THAT LAST!

Creo-pine Block Floors outlast the plant and effect maximum floor economy. Assure freedom from floor repair or replacement costs.

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Atlanta, Ga.

Creo-pine conduit, cross arms, fence posts, cross ties, timber and piling.

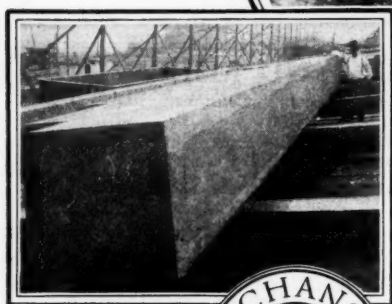
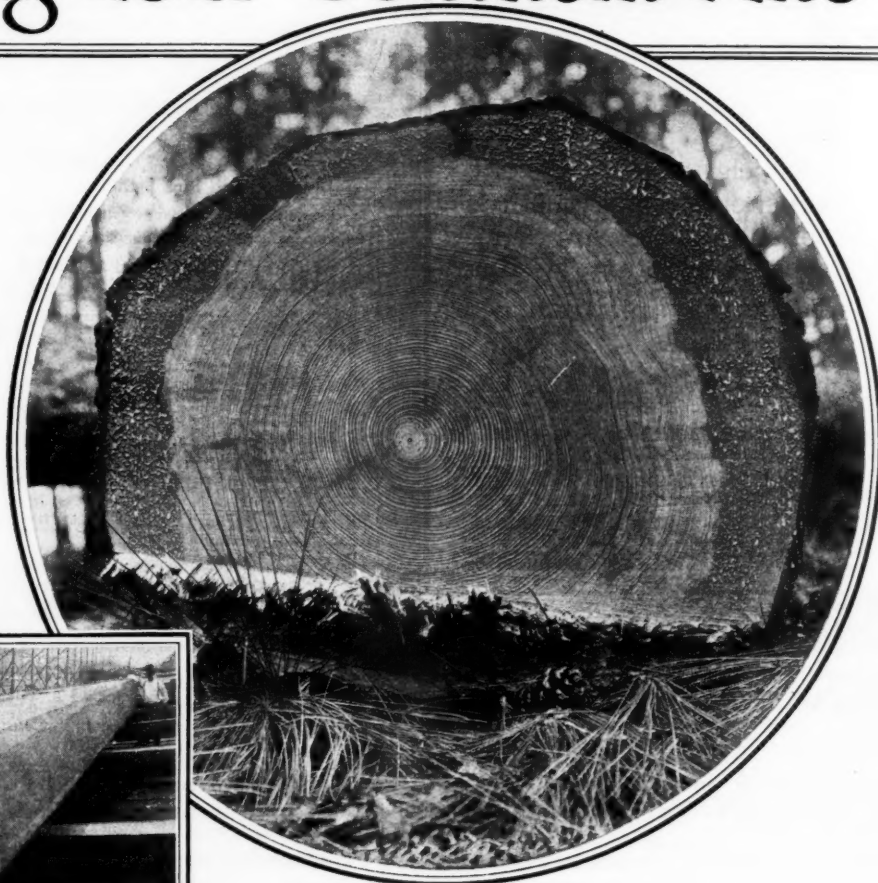
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OFFICE 165 BROADWAY, NEW YORK.

CREOSOTING WORKS

JACKSONVILLE, FLA., LONG ISLAND CITY, N. Y.
MANUFACTURERS Lumber, Piles, Poles, Ties, etc.

DENSE ~ DURABLE ~ DEPENDABLE
Long Leaf Southern Pine



For Railroads—

Bridge and Trestle Timbers, Flooring, Roofing, Siding, Lining, Sills, Framing, Sawn Ties. We make a specialty of bridge stringers.



For Railroad Builders—

Close grained virgin long leaf timbers and heavy lumber for slow combustion construction.

DENSE, durable, dependable long leaf Southern Pine has no equal among woods commercially available for construction entailing unusual strain and wear.

Exchange Sawmills Sales Company, because of its exceptional stands of big timber, makes a specialty of timbers and lumber for car builders, factory builders and other users of wood wherein there must be, above all, outstanding strength and durability. Our products meet the strictest specifications and yet they cost no more.

Because of the location of our eight mills as to shipping facilities and because of their enormous capacity—1 1/4 million feet per day—we are able to ship promptly the various items desired.

LONG AND SHORT LEAF SOUTHERN PINE
 Yard and Shed Stock and Heavy Structural Materials

EXCHANGE SAWMILLS SALES CO.

Long Building (Formerly Missouri Lumber & Land Exchange Company) Kansas City, Mo.

Sales Department for

LOUISIANA LONG LEAF LUMBER CO.

Fisher and Victoria, La.

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LOUISIANA SAWMILLS CO., Inc.

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WHITE-GRANDIN LUMBER CO., Inc.

Slagle, La.

FOREST LUMBER COMPANY, Oakdale, La.

ADDITIONAL CAPACITY

We have purchased the two large saw mills of the American Lumber Company at Merryville, Louisiana. These mills will be started up at once.

Thirteen saw mills cutting Southern Yellow Pine and Hard Woods are at your service—with a quality of product that guarantees satisfaction.

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TUPELO
"THE HARD-WEAR"
LUMBER

FOR FACTORY FLOORS FOR FACTORY FLOORSTUPELO
TUPELO LUMBER MAKES FINE FACTORY FLOORS THAT
WON'T SLIVER TUPELO FLOORS GET SMOOTHER AND
SOLIDER AND DENSER THE LONGER YOUR TRUCKS ROLL
OVER THEM BETTER POST YOURSELF AND YOUR ARCHI-
TECT ON TUPELO LUMBER FOR YOUR FACTORY FLOORS
THEY GET BETTER UNDER TREADING OF COURSE YOU CARE

Write us for full information.

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P. S.—Compare Tupelo Floor Costs With any fair competitive material

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OFFICES**

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Carson, La.
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Conroe, Texas

All former records for a like period were broken when building permits for the first quarter of the year amounted to 124,986 buildings to cost \$541,000,000. This compares with only 100,120 buildings during the same period last year to cost \$288,000,000. The lumber market is reflecting these conditions to an increasing extent each day.



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SOUTHERN PINE
"LONG AND SHORT LEAF"



Yellow Pine

Structural Material
for Industrial Plants.

Bridge, Trestle, Car
and Railroad Stock.

**Central Gulf
Lumber Co., Inc.**
New Orleans, La.

YELLOW PINE

Structural Timbers—

FORM LUMBER—FACTORY FLOORING
FRAMING—BOARDS—FLOORING—ETC.

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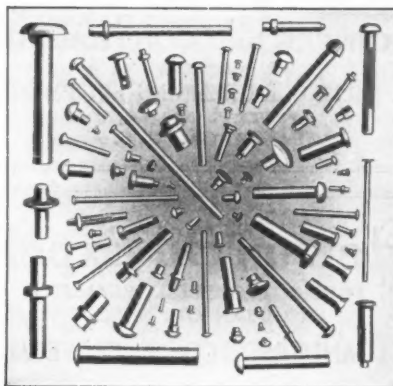
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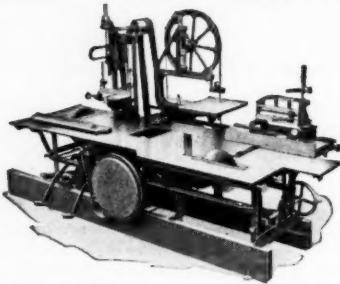
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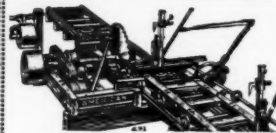
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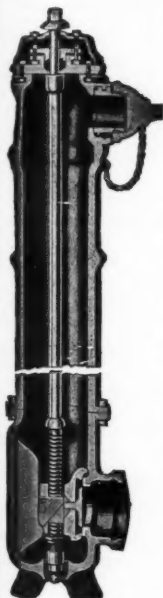
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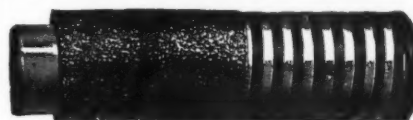
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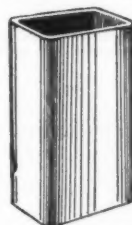
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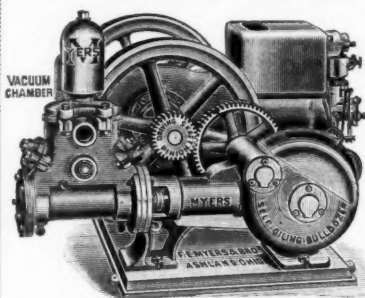
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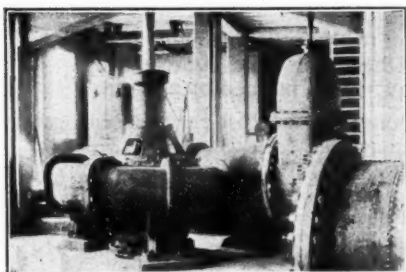
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No. 12



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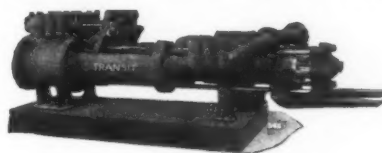


FIG. 540

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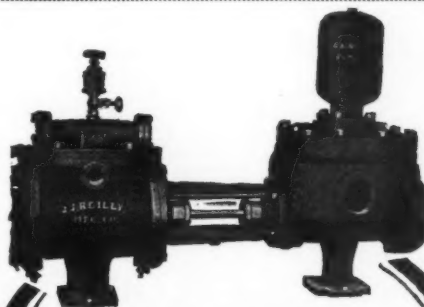
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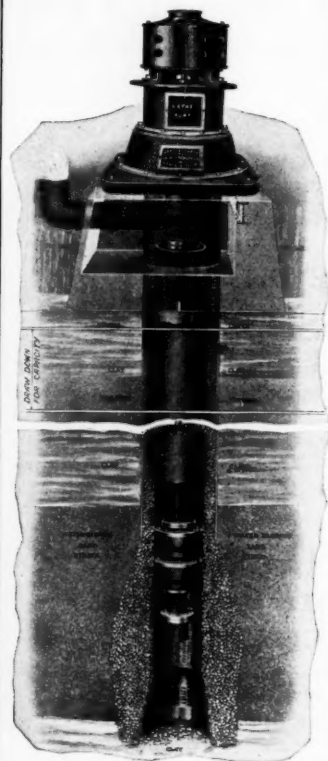
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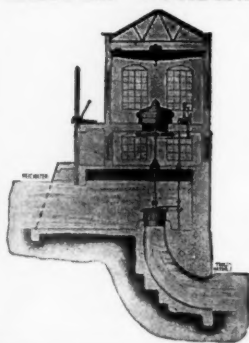
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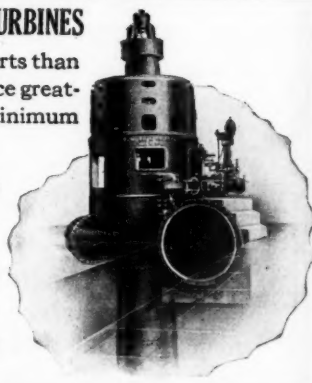
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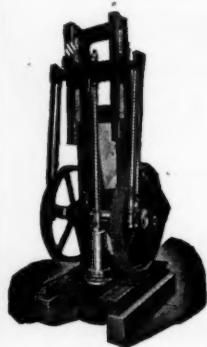
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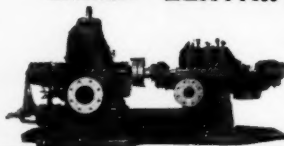
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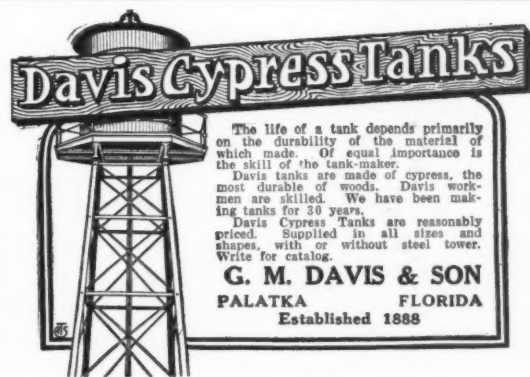
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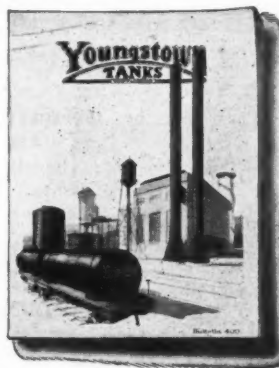
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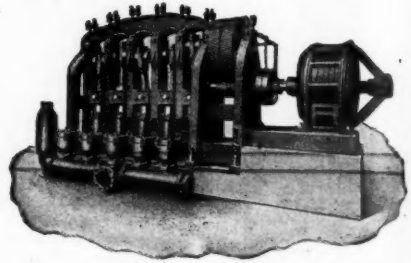
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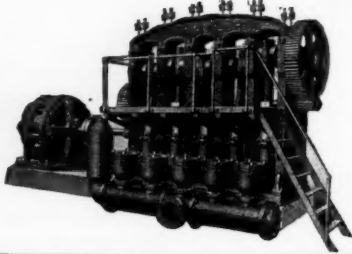


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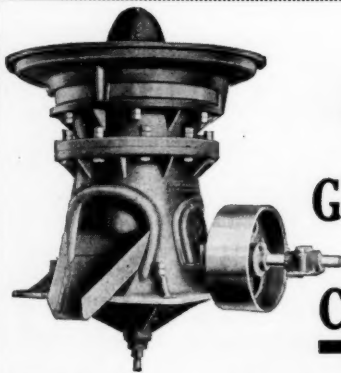
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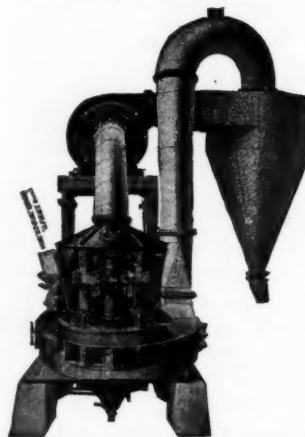
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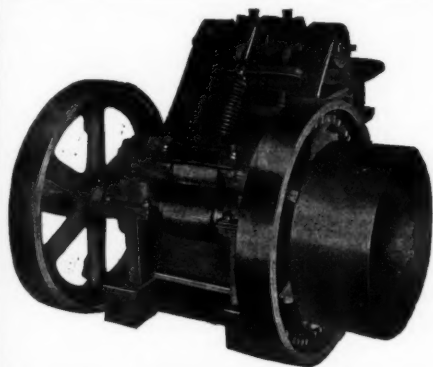
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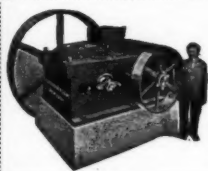
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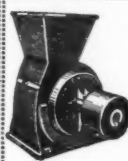
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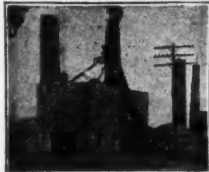
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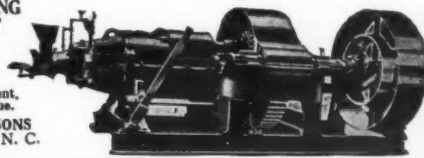
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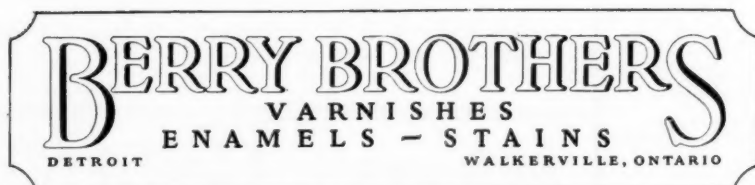
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Manufacturers Record

Exponent of America

JULY, 13 1922

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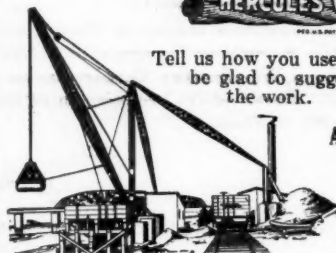
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WEEKLY.

BALTIMORE, JULY 13, 1922

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FRANK GOULD, Vice-President

VICTOR H. POWER, Treasurer
J. S. FIELD, Secretary

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In order to avoid delays all correspondence pertaining to news or advertising matters should be addressed directly to the Manufacturers Record, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

\$16,000,000 FOR ORDERLY CROP MARKETING.

ON June 29, the War Finance Corporation tentatively approved the following applications for advances to assist in financing the orderly marketing of cotton and wheat:

Oklahoma Cotton Growers Co-operative Association, \$6,000,000; Arkansas Cotton Growers Co-operative Association, \$7,500,000; Oklahoma Wheat Growers Association, \$2,500,000; and Texas Wheat Growers Association, \$500,000.

It is expected, states Director Meyer, that only a portion of the amounts authorized will be advanced by the Corporation and that the banks in the interested districts will do a considerable part of the financing for these associations.

While this \$16,500,000 is but a drop in the bucket to the total amount necessary for crop movement in the South, it nevertheless aids in stabilizing prices and in this way assures protection to the borrowing grower who otherwise would have to dump his crop as quickly as possible to satisfy loans no matter if the price was way below the cost of production. The farmers of the country might have been saved their stupendous losses if the War Finance Corporation had been allowed to function when it was so sorely needed.

ILLINOIS NEEDS TO CLEAN HOUSE.

WHAT is Illinois going to do about the murder of innocent men by rabid foreign union labor assassins whose crimes in ferocity and atrocity stand unrivaled in American history? And will the Chicago Tribune which has so often viciously attacked the South for criminal acts committed in this section, now admit that Illinois leads the nation in the extent of its criminality, and worse than that in its smug complacency and the failure thus far of its state officials to take any serious steps to punish the Herrin murderers?

TWO GOOD FOURTH OF JULY SPEECHES.

IT was appropriate that on July 4 at his home town President Harding should call the nation to a realization of the responsibility of obedience to law and of the right of men to work. It was also a happy coincidence that General Pershing, who guided the nation's armies to victory on the battlefield's of France and thus helped to save civilization, should utter a warning every word of which should be pondered by the American people.

President Harding among other things said:

"We are great and rich and powerful as to States and sections; we are in full concord of union. This great organic law has been preserved and its ambiguities removed. Where there has been enlarged Federal authority, the States have wished it so. The Constitution has been amended to meet the popular will. Our representative form of constitutional government is responsive to the will of the majority, responsive to the expression of deliberate public opinion. It must be so to endure. Majorities, restrained to the protection of minorities, ever must rule. The Constitution and the laws sponsored by the majority must be enforced. It does not matter who opposes. If an opposing minority has a just objection, the rising tide of public opinion will change the law. There is no abiding liberty under any other plan.

"I mean to sound no note of pessimism. This Republic is secure. Menaces do arise, but public opinion will efface them. Meanwhile Government must repress them. The Eighteenth Amendment denies to a minority a fancied sense of personal liberty, but the amendment is the will of America and must be sustained by the Government and public opinion, else contempt for the law will undermine our very foundation.

"The foremost thought in the Constitution is the right to freedom and the pursuit of happiness. Men must be free to live and achieve. **Liberty is gone in America when any man is denied by anybody the right to work and live by that work. It does not matter who denies.**

"A free American has the right to labor without any other's leave. It would be no less an abridgment to deny men to bargain collectively. Governments cannot tolerate any class or grouped domination through force. It will be a sorry day when group domination is reflected in our laws. Government, and the laws which government is charged with enforcing, must be for all the people, ever aiming at the common good."

Two statements stand out clear and distinct as the call of the nation's president to the people of this country. One is obedience to law as the only safe foundation on which liberty can be maintained; the other is that every American has a right to labor without the domination of any other man or organization having the right to say that he shall not labor. This is an emphatic statement against the effort of union labor organizations to control by domination the

right of employers and employees who do not want to be under that domination of unionism which often means domination.

In the same line of thought General Pershing took high ground both as to the right of independent labor, as to the protection which the individual man and property has a right to demand from the National Government, and to that he added a few words in regard to the need of preparedness which cannot be too often reiterated; for non-preparedness brought upon us much of the awful cost in the European War, and non-preparedness to defend ourselves against attack might again endanger the safety of our nation and bring a fearful cost in men and money. On these points General Pershing said:

"Moral standards have become materially weakened, and the criminal elements of society are less cautious in their activities. It is time for all citizens who cherish our heritage of free government to assert themselves and cry out against lawlessness and immorality. We must stand for prompt enforcement of the law, or concede that free government is a failure.

"Open adherence to the lofty ideals is quite as essential now in the post-war days as during war-time, when impending danger inspired everyone to unselfish devotion and service.

"The voice of the blatant pacifist is again heard in the land. The unreasoning, the unthinking and those who will not learn from experience continue to advocate the theory that complete disarmament will prevent war. In the knowledge that our army is of the people, and in the face of the loss of life and the cost in money that we ourselves have recently withstood as a result of neglect of the most feeble preparation, they pronounce against any sort of military training or preliminary organization and would so reduce as to make expansion impossible within any reasonable period and possibly again compel the enormous expenditure of life and treasure under which the country is suffering today.

"I venture to say that few, if any, of those who would destroy our small army and navy in times of peace were found in the ranks with those brave and patriotic men who fought to destroy the armies of our enemies on the field of battle."

Speaking of the signs of relaxed standards, General Pershing said:

"Under the Constitution every man is guaranteed the right to live, to enjoy liberty and pursue happiness, but there are those who defy these guarantees and seek to deprive others of these sacred privileges.

"Where whole communities openly sympathize with ruthless murder of inoffensive people in the exercise of the right to earn a livelihood, and where wholesale murder goes unpunished, it is imperative that public opinion should demand that the strong arm of the law, under fearless officials, take positive action. Overt and inexcusable acts of this character not only debase the participants, but lower the whole moral fabric of the nation and strike at the very existence of self-government."

WOULD THAT EVERY SOUTHERN BUSINESS MAN AND EVERY COMMERCIAL ORGANIZATION WERE AS WISE.

Gastonia, N. C., July, 1, 1922.

Editor Manufacturers Record:

We are enclosing check to cover subscription for the following year.

We, of course, can not do without the RECORD as it is the most valuable publication coming to us, and besides, we consider it the greatest friend the South has today.

FRED M. ALLEN,

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JUDGE WOLVERTON OF THE UNITED STATES CIRCUIT COURT DECIDES AGAINST A FEDERAL RESERVE BANK.

THE methods adopted by various Federal Reserve Banks to cover non-member banks in the matter of par clearance of checks have once more received the severe condemnation of the courts. Judge Wolverton has made permanent the temporary injunction against the Federal Reserve Bank of San Francisco in favor of the Brookings State Bank of Oregon, a hotly contested case to which we have previously referred. Many banks not having the backbone of the Brookings bank yielded under "coercion" to the San Francisco bank's bulldozing tactics, but the Brookings bank has won a signal victory, the benefits of which will inure to all non-member banks.

In granting his permanent injunction Judge Wolverton said:

"The testimony here impels me to the conclusion, that the federal reserve bank has gone to the length of endeavoring to coerce the Brookings state bank to accede to its demands that the latter bank agree to remit at par. Its purpose is obvious from the fact that it maintained an agent at Brookings for practically a year at an expense to it of \$3542 for collection over the counter of checks and drafts drawn upon the Brookings bank, knowing that the procedure was embarrassing to the bank, and required it to maintain a much larger reserve in its coffers to take care of its current business thus depriving the bank of a portion of its ordinary earnings."

Referring to a reasonable charge for check collections the Judge added:

"This is a right the bank may relinquish at its option, but it ought not to be coerced into doing so, or agreeing to do so, and any strategy which has for its purpose the coercion of such non-member bank to yield its legal right in this respect is unlawful, and will not be approved by the courts. The Supreme Court, speaking through Mr. Justice Holmes, has put the stamp of disapproval upon the act of a party massing a number of checks against a bank and presenting them in bulk at the counter for payment."

"As it relates to the method adopted by the defendant for making collections through the mail by sending checks and drafts drawn upon the Brookings bank direct to the bank, indorsed 'Pay to the Brookings State Bank for collection only and remittance in full without deduction for exchange or collection charges,' it is plain that the bank was not called upon so to remit and its return of the checks without payment was not tantamount to dishonor.

"While under the prevailing custom the defendant bank could rightfully remit checks and drafts drawn against the plaintiff bank direct to the latter for collection, and could thereby exact payment of them, it could not impose conditions upon which such payment should be made, much less could it make the plaintiff bank its agent for causing protest to be made for non-payment. The idea of requiring that a maker or drawee shall have protested his own paper is so inconsistent with the functions of an agent that it can hardly receive the sanction of law."

Naturally the MANUFACTURERS RECORD is gratified that one by one every position which it has taken in regard to this matter is being sustained by the United States Courts, though our efforts to insist upon fair and honorable management of the Federal Reserve System have been vilified by the short-sighted men who would not see that they were pursuing a policy destined to create widespread justified hostility to the whole system.

PRESIDENT HARDING ON OBEDIENCE TO LAW.

THE Eighteenth Amendment denies to a minority a fancied sense of personal liberty, but the amendment is the will of America and must be sustained by the Government and public opinion, else contempt for the law will undermine our very foundations. —From speech at Marion, Ohio.

Union Coal Miners' Crimes in Illinois as a Warning to the Nation.

WHAT LEADING AMERICAN PAPERS SAY ON THIS VITAL ISSUE.

No part of this country is free from crime. Every state and every city have their criminals. Murder is more rampant than ever before in our history, and much of this criminality is due to the lawless teachings and lawless acts of those who violate the nation's laws.

For years Union Labor leaders have ceaselessly denounced the courts and sought to place Union Labor above the laws and the courts. With rare exceptions wherever Union Labor has gone on a strike it has lawlessly sought to destroy the property or the lives of men not subservient to its tyranny.

The horrible massacre in Illinois of non-union miners was but the natural and inevitable fruitage of the seed which had been planted by some Union Labor leaders, by demagogic legislators and sometimes by misinformed men of Socialist trend.

Union Labor has been taught that it is so far above the law, that the murder of a non-union laborer is not a criminal act but merely warfare justified by the effort of Union Labor to dominate by rule or ruin.

Perhaps the lesson taught by the fearful crimes in Illinois will arouse the country to the seriousness of the situation, and out of this horrible evil good may come; but only evil will come unless the people of the whole country take the determined stand that in this country a man shall have the right to work whether he belongs to a labor union or not, and that no organization shall ever have the right to dictate to employer or employee who shall have the right to work or who shall be employed on any job. If the Union Labor man wants to quit a job he has a perfect right to quit, but the moment he undertakes by force to prevent others from working he becomes a criminal at heart and a criminal in act when he seeks by violence to prevent others from working.

A dispatch from Herrin says that the coroner's jury placed the responsibility upon the Southern Illinois Coal Company "for operating its mine while a strike was on."

A man who strikes is no longer an employee of the company from which he definitely severed all connection the moment he went upon a strike. The sooner this fact is realized the better it will be for our country.

The striker is not an employee. He has voluntarily ended his connection with his employer.

Every concern has a right to operate its plant entirely without regard to whether a strike is on or not, and the coroner's jury, as reported, might just as well have placed a high premium upon murder wherever committed as to have rendered a verdict to the effect that a coal company was to blame because it presumed to "operate its mine while a strike was on."

The condition in Illinois as indicated by the unspeakable, indescribable criminality of the men who murdered in cold blood the independent, non-union men, is not a matter of local interest merely. It is a symptom of a nation-wide spirit which, unless curbed, would destroy America by bringing on in this country a chaos matching that in Russia.

We need not for a moment say that such things are impossible in this country.

All through history the impossible has become the reality.

In the early summer of 1914 any intelligent American would have considered it impossible to conceive that any great American army would fight on the battlefields of Europe. But the impossible became the reality.

A few weeks ago any man predicting such a dastardly and indescribably vile criminality as that developed at Herrin would have been laughed at and his predictions considered impossible of fulfillment in this country. But the impossible became a reality. We must take warning and take it to heart with a full realization of the possibilities involved in rampant lawlessness.

It is well that the papers of all parts of the country are recognizing the seriousness of the situation typified in the Anarchistic, Bolshevistic, murderous work done in Illinois by men claiming to have committed their crimes in the name of organized labor. We give some extracts from leading daily papers as indicating the horror of this country at the crimes in Illinois and the demand for punishment of the criminals and for the right of every man to work untrammelled by radical labor unionism.

What was done in Illinois in the name of union labor as told by the Associated Press surpasses in hellish fiendishness any record of crime known to mankind. Ministers of the Gospel, missionaries, editors of religious papers and others are clamoring for America to rescue the Armenians from the Turks. Will the same people turn with the same energy to the awakening of the American people to these horrors in our land, equalling and perhaps surpassing any crimes the "unspeakable Turks," (or the "damned Turks" as one great London minister once called them in his pulpit as he sought to arouse England to the horrors of Turkish atrocities), ever committed.

We shall be accounted Pharasaical hypocrites if we demand protection for the Armenians, or denounce the unbridled criminality of Bolshevism in Russia until every pulpit, every platform, every paper in the land rings with the story of our own bestiality and until some power is put into operation to enforce the death of every man guilty of these awful crimes.

Radical Unionism has brought forth its natural product in a spirit of hate unmatched perhaps in history in a

saturnalia of crime as innocent men were butchered and dragged behind automobiles while women and children looked on and gleefully denied a drop of water to dying men.

What answer will Illinois make? What answer will the nation make to this challenge of hell let loose in Herrin against the forces of righteousness and civilization and all Government?

Until the whole machinery and power of Government is put to work to punish the criminals, and until every union labor organization unsparingly denounces this crime and is ready to cooperate in punishing the criminals, there can be no safety for civilization, for no one can know where unionism may next break forth to murder and riot and gloat over the assassins' deadly work done in the name of unionism.

Every patriotic American may well call upon union labor to disavow sympathy for the Illinois assassins, for union labor is at the crisis of its whole history, and today America's only safety is the independent or non-union laborer and the hope that perhaps the honest patriotic ones in labor unions will rise to the occasion and drive out radicalism from its diabolical control of their organizations. If this language seems strong, read again the story as told by the Associated Press.

Here it is in all its gory ghastliness:

[Associated Press Dispatch from Herrin.]

The scenes of death were as gruesome as any in a real war. Bodies with many parts shot away lay along the roadways or were strung from trees. Men wounded and dying were stretched out on roads and in fields with none of the hundreds of passersby able to lend a helping hand.

Attempts to assist the wounded brought rebuffs from the spectators, backed in some cases by drawn pistols.

Hundreds of men, women and children, some as young as four years, surged into the morgue to view the bodies, which lay side by side on the floor, with no attempt to straighten them out. All were mangled.

Usual solemnity of death is lacking in the local morgue. Hundreds of persons filed past the lines of bodies today frequently commenting on their mutilated condition. Children laughed, women pointed and the men chuckled.

All reports agree that the killings really were a massacre—that the victims were shot down in cold blood after they had put up their hands and surrendered themselves and their arms to the attacking forces.

Many persons in the county uphold the slaughter as a rightful act of judgment. Citizens gathering on the street corners today laughed and joked over the affair.

C. K. McDowell, strikebreakers' superintendent, with only one leg, was beaten to death with stones before being riddled with bullets.

He refused to march with the other prisoners, who were tied together and told to run down the road between lines of attackers who poured buckshot, rifle and pistol bullets into them as they fled.

Few of the dead could be identified. Most of them had been rifled of all effects.

The order of Governor Small to hold 100 men of the militia in readiness in Chicago was greeted on the street with sarcastic comment.

The request of the governor for an official report brought more sarcasm, the gist of which seemed to be that there was nothing to report officially.

All that remains of the Lester mine is a heap of ashes, for it was set on fire shortly after the attackers captured it.

"Be one of us, keep moving and ask no questions," seemed to be the order in the theater of operations about Herrin.

Joseph O'Rourke, of Chicago, commissary clerk of the mine said:

"They tied five men with me, took us out on the road and told us to run. We ran and hundreds of bullets followed us.

"We staggered on, but finally three of our group fell, pulling the others down, several bullet holes being in me already.

"I lay there while men came up and fired more shots into us from three or four feet. Then everything went black. I woke up later and begged for water.

"I remember being dragged along the road."

James E. Morris, a young miner in the attacking forces, told the correspondent the attack had been spontaneous.

"I was on my way to Herrin," he said, "when I met a gang of fellows. They said they were on their way to run out those scabs at the mine. I joined them and others kept joining us until there must have been 5000. Most of us were armed and those that were not soon got their guns.

"It was just one big mob out to get them who were running that mine."

There were several thousand men and boys present when the non-union men were killed.

The man hunt was continuing over a wide area. Out in a road near the mine, six men tied together and terribly

mangled by bullets and clubs, were lying in a scorching sun, while hundreds of men and women laughed at their plea for water made in the name of God.

One of the men, his face bloody and one shoulder shot away, apparently was within a few minutes of death.

"Please, boys, give me a drink," he moaned.

A laugh from hundreds of spectators was the only reply.

The correspondent rushed to a house for water and when he returned he was faced by quickly drawn pistols and told to keep away.

When the man again begged for water, "for God's sake," a young woman with a baby in her arms, placed her foot on the mangled body and said:

"I'll see you in hell before you get any water."

The men apparently had been dragged down a rock road behind an automobile. Their clothes were torn and pieces of gravel were imbedded in their mangled flesh.

The correspondent saw men wounded almost to death, kicked around in the scorching sun on dusty roads. He saw men chased through fields like rabbits by shouting persons who opened fire.

Surrounded by armed men, he saw a knife plunged into the throat of a wounded man who in his dying breath gasped a plea: "In the name of my mother, in the name of your mother, in the name of God, give me water," only to receive laughs and jibes such as: "Where you're going you won't see any water."

Mothers carried babies into the morgues and up to piles of bodies in the roads with such remarks as "Take a look at what your papa did, kid."

He watched a man walk to the bedside of a dying man and curse him and jeer at him as he breathed his last.

Through it all, although the fight area was traversed a dozen times, there was not a word heard of sympathy for a victim.

The sentiment seemed to be that strikebreakers deserved slaughter and that they had received it.

Young matrons and girls encouraged their men in the slaying of captive mine employees.

"Let's make soap of them," one of the women suggested as six men, banded together with a rope, were shot down with one volley.

An examination showed that one of the six still breathed.

An executioner with a ready knife completed what the bullets had left unfinished.

"The Illinois Massacre" Teaches the Danger of Union Labor Domination.

The Lynchburg (Va.) News in speaking of "The Illinois Massacre," says:

The shocking massacre of non-union miners at Herrin, Illinois, interpreted into hellish deed the vicious doctrine that men have no right to take places made vacant by strikers; that by an unwritten code recognized among many members of various union labor organizations, such a substitute should be regarded as an outlaw, a vile felon, who should be shot to a death like a craven dog if undertaking to exercise his fundamental right as an American citizen to accept legitimate employment. The dread occurrence does not raise that issue; it simply emphasizes its importance and tends to the more sharply center public attention upon it as involving an impudent and lawless disregard of the liberty of the American citizen, for which American citizens, acting upon class impulse, make themselves responsible.

The exhibition afforded by the damnable and ferocious

occurrence at Herrin, thus performs a service of value, even though it resulted in heinous crime, perpetrated under especially revolting and unthinkable brutal circumstances, and consigned a large number of non-union miners to death. It will tend to arouse the public conscience and stir public thought and create a vast wave of public indignation, which in turn will lead to a clearer understanding of the attitude of many strikers and many strike leaders towards the Government of the United States, and of the constitutional attributes of American citizens who happen not to be associated with Union Labor. Perhaps the permanent settlement of that question has too long been permitted to remain in nebulous state. Now, however, it must be so clearly settled that none can claim they do not understand.

And what is that question? It is very plain. It is this. Has a non-union man the right to labor and support his family in free America? If he has, then is there any qualification to that right? If so, by whom is that qualification imposed? By Union Labor? But Union Labor is not the Government, and is possessed of no law-making power any more than a Wholesale Grocers' Association. The Government has that power—ONLY the Government. But the Government has attempted to impose no such qualification. And it never will unless Union Labor gains control of the Government, and imposes its will upon the American people as it may see fit—all of which would mean the substitution of class sovereignty for popular sovereignty. However, it is now the absolute right of an American citizen to work, to earn an honest living by such honest labor in any employment he may choose. If this is not so then our theory of free citizenship is a farce. Therefore when a miner approaches a mine at which there is a strike and seeks employment there, the owner has the right to employ him, and he has the right to contract with the employer as to terms and conditions under which he shall work. If to this, organized labor says "No," then organized labor puts itself above the Government, above the Constitution, above the laws, and deliberately seeks to contravene the three.

It is true that labor has the right to organize; to bargain collectively; to strike; to use all legitimate methods of argument to persuade others not to take the places made vacant by strikers. But it is asserted unconditionally that when Union Labor resorts to methods by way of threats or terrorism, or violence or the encouragement of violence, to prevent non-union labor from serving as substitutes for strikers, then is attempt made to lay the axe at the root of the tree of constitutional liberty, and those who wield it become openly hostile to the basic principles of the American Government. This thing, this awful, monstrously hideous thing which has just occurred in Illinois not only revives this line of thought but vividly presents the question whether the Government is able to protect the American citizen, the American workingman, union or non-union, from such assaults upon their constitutional and lawful rights as are at times witnessed in controversies between capital and strikers. If it is not, then it is a sorry old shebang which will neither deserve nor receive the respect and the confidence of the American people.

In the meantime, the first requirement of the situation is that official authorities shall hunt the Illinois murderers down, bring them to the bar of justice, and mete out adequate punishment.

Anarchy Surpassing That of Russia Which in Illinois Assassinated Civil Authority.

Under the heading, "ANARCHY!" the Louisville Courier-Journal, says:

Unless the news reports have been incorrect there is no anarchy in Russia worse than that which prevails in Williamson County, Illinois. Bolshevism is blooded with crimes no more brutal than those which have befouled the coal mining region of Herrin.

Stores, according to the reports, were sacked of arms and ammunition. Hundreds of men and women, crazed by passion into fiendish fury, threw off every restraint of law and humanity. Assassinations from ambush were followed by assassinations wherever the assassins' victims were found. Mine workers were rounded up by overwhelming numbers and slain in their tracks. The fleeing were shot down in their flight. Prisoners were ruthlessly slaughtered. The wounded were tortured. Murder became massacre. More than a score of men were hanged, shot or beaten to death, until fifteen square miles of the country are reported strewn with the dead and mangled.

And nowhere in all the reports of this bestial frenzy was

there mention of any effort of officers of the law to restrain or put it down.

There are no officers of the law in Williamson County. There is no law there except the law of the jungle. All other law has been murdered with the human victims whom it was instituted to protect.

The Adjutant General of the State complacently expresses the opinion, that "the worst is over." The worst is not over. The worst was not the assassination of twenty or thirty human beings, **but the assassination of all civil authority.** Until that is supreme in Illinois the worst will not be over.

There are no words in the language which Americans speak too strong for denunciation of this outrage, upon the institutions which Americans cherish. It is immaterial what was the issue between the strikers and their victims; it is immaterial what were the merits or demerits of that issue; who was in the right or who was in the wrong. On those points The Courier-Journal is ignorant, as is the country generally. The real issue in this atrocious affair is not between the strikers and the mine operators; not between Labor and Capital. It is between organized society and mobocracy; between self preservation by law and total damnation by anarchy. To that issue there can be but one outcome in this country, if our Republic is to endure, as the great majority of the American people believe it is to endure and mean it shall endure.

If Capital and Labor, or any other class of our citizenship, misreads that issue or aligns itself on the wrong side of it, the loss in the end will be its own, not the Republic's.

A Demand That the United States Government Make Clear That All Men Shall Have the Right to Work.

The Florida Times-Union of Jacksonville, Fla., says:

One of the men who had gone to the mines in Illinois to work where a non-union man had left the job because discontented with the pay, (or because ordered to do so by the big bosses), and was only wounded when trying to escape from the mob which had intimidated him into consenting to leave the place, declares that the men who assaulted and killed many of those who were fleeing shouted, "What do you expect; trying to take the union men's bread!" And right there is where the United States Government should make the point clear and strong. The union man is no more entitled to bread that he has not—and will not—earn than he has to the court jewels of Great Britain or the flocks and herds of the Australian cattlemen.

Union labor has been falsely taught to believe that it is above all law. Unscrupulous politicians, some of whom are in Congress and others camping thereabouts to bribe, intimidate and influence members of that body, have sought repeatedly to enact partisan legislation in favor of a certain class of workers in this country, but the idea that any job belongs to any man or woman who fails for one reason or another to fill it to the satisfaction of the employer is worse than absurd. There is neither justice, equity nor common sense in such a proposition—and if it was undertaken to carry out such a scheme the world would go upside down in a hurry.

As a matter of fact the labor unions of the country would do well to at once decry and regret the occurrences reported from Illinois coal fields. Union labor has shown an ugly, selfish and altogether unreasonable disposition during the past few years that has done everything but popularize the system with thinking people. The lynching of forty men who had committed no crime other than undertaking to pick up a discarded tool and carry on a needed industry that was being hampered by the unreasonableness of a group of workers imagining themselves beyond and above the law of supply and demand is a direct blow to Americanism.

Wages generally, increased in a most unpatriotic and selfish way when the country was in dire necessity, had to come down if industry was to continue, and yet, at the instigation of well paid officials, the coal miners struck and then presumed to say that others should not carry on the necessary work.

The laborer is surely worthy of his hire—provided he works and earns the hire; he is not entitled to pay if he refuses or neglects to work, and it is not his bread unless he does something to get it. That he should have anything to say as to who shall do the work he has left undone is preposterous.

A great deal of talk has been heard about Americanism and while the term is rather indefinite it would appear that it could be applied to many things but never to trade-unionism. Over and over again trade unions are proving

un-American; steadily they are losing friends among the ninety per cent of the population outside the unions; if they do not quickly denounce such action as recently reported from the Illinois coal fields they must expect to slowly disintegrate. Thinking men and women will wish to withdraw from such organizations, countenancing such outrages.

Men and women with souls shudder when told of Indian massacres of long ago. What must be their feelings when they read of the massacre of men at work, trying to earn an honest living and at the same time supplying the needs of the public for fuel?

American Men Are Killed for Not Joining a Union.

The Greensboro (N. C.) Daily News laments the fact that this country has "no Napoleon" for this "reign of terror," and says:

Terror is the order of the day.

From Moscow to Herrin, Ill., assassination has come to be an every-day argument, used in all sorts of disputes. In most places it is still deprecated, still has apologists; but in Illinois they seem to regard it as quite all right, the natural and logical thing for men to do when they are irritated.

In Russia men are killed for being aristocrats; in Germany they are killed for being patriots; in Ireland they are killed for being Protestants in Catholic communities, and for being Catholics in Protestant communities. But in the United States they are killed for no sin of commission, but for omitting to join the union. In which country is civilization at its lowest ebb?

Mr Littleton's analysis of the extraordinary outbreak of crime printed in the Daily News is interesting, and plausible enough. The world cannot be taught how to resort to violence for five years without applying the teaching in some unexpected and undesired fashions. Unemployment, also, always recruits the ranks of criminals. Times of financial depression are almost invariably accompanied by what are known as "crime waves."

But, whatever the cause, Terror is the order of the day. The whole world is more or less under its sway, as France was in 1793, and the fact should be recognized in order that organized government may conduct itself accordingly.

In France Terror reigned and extended its sway until a swart artilleryman discovered and applied the remedy. In the world of today is it not reasonable to believe that the same causes would produce like effects? Napoleon ended the Reign of Terror in France with what he described as a "whiff of grape-shot." Grape-shot is out of date; and so, it is to be feared, is the courage and resolution of the Corsican. A couple of well manned machine guns would have taken the enthusiasm out of the butchers of Herrin. A determination on the part of the Government to protect men who want to work, and if necessary to blow the life out of any and all who offer to molest them, would instantly end the reign of terror in all the coal fields.

We have the reign of terror. We have the equivalent of the grape-shot. But unfortunately we still lack Napoleon.

The Volcano.

[Fairmont, West Virginian.]

Troops have been recalled from Herrin and everything is reported quiet. The governor of Illinois reports that law and order have been restored. Exactly. The mines having been closed, the employes murdered and mine machinery destroyed—there being nothing left to do—there must be quiet.

It is the quiet like that which settles over Vesuvius. It is a bad mistake to say that law and order has been restored. Law and order will not be restored to the pedestal from which they have been wrenched until those men who butchered twenty-five human beings have been brought to justice and punished as any murderer should be punished for his crime.

The volcano smolders. It will not break out again in Herrin. The spotlight of public opinion is centered too strongly upon that point, and besides, the union mob that over-ran Herrin left nothing to fight over. It is stated that dozens of men are departing silently, swiftly, from Herrin. Where will they go, and what fresh mischief will they brew at other points? The American public has had enough of union mob violence.

Senator Myers of Montana voiced the sentiment of the public in these words,

"There is no free America, and there never will be until an American citizen who wants to work and earn an honest living can go and get work and pursue that work in peace without having to obtain the consent of an invisible government."

There is still a healthy preponderance of American citizens, really American citizens by birth and breeding, who believe that America can safely abide by the justice of her courts, and that her laws are above the laws of union organizations, and her citizens beyond the dictation of union mobs and leadership. This opinion is crystallized. If the leaders of the United Mine Workers have any control whatever over the Frankenstein they have conjured up, they had better put the lid on mob violence and keep it there tightly.

America Has Been Challenged by the Illinois Horror.

"A Challenge to America," is what the Boston Transcript writes of the slaughter of innocent workmen in the Illinois coal field by Bolshevistic foreign mobbists operating under the cloak of Unionism. And this great American daily states that:

The Government at Washington must not make the mistake of assuming that the settlement of the coal strike will dispose of the challenge to Government the country over involved in the Herrin massacre and the degrading aftermath of that heinous crime. As long as any member of Herrin's mob goes unwhipped of justice, as long as the miserable wretches in the town of Herrin and the county of Williamson, who betrayed their trust as the duly elected custodians of law and order, retain their offices, as long as the government and people of the sovereign State of Illinois remain supine before the threats and intimidation of the president of the United Mine Workers and his lawless gang, the coal strike and every other pending question must remain matters of very secondary importance to the average citizen here and everywhere.

If government by murder is to continue in the town of Herrin and the county of Williamson, with the consent of the government of Illinois, why should the Government of the United States continue the delivery of mail anywhere in Williamson County? What right have the citizens of that county to expect to be served in any capacity by the Government of the United States and at the expense of the people of the United States, who stand today humiliated and disgraced before the world by a crime that will by the world be regarded as the American counterpart of the Lusitania massacre? If the Government at Washington has the will it will find the way to bring the government and people of Illinois to a belated sense of their responsibility in the premises.

Until that way has been found and until the state of Illinois has been prodded by a sense of its own shame or by condemnation from the outside into punishing the guilty and restoring to the innocent the right to do an honest day's work anywhere in Illinois, unmolested by murderers, whatever their disguise, the patience of the American people should not be further irritated or their self-respect further insulted by any announcements from Washington of plans to settle the coal strike.

It is the Herrin massacre that must first be settled to the satisfaction of the American people and in accord with American traditions by bringing to the bar of justice each and every one of Herrin's murderers and the faithless public officials that continue to cower in the shadow of that outrage.

Herrin's heinous crime is a challenge to America, the Mother of us all—of the new comer to her household no less than of the native born. It is a challenge that must be met now. It is a challenge that must be met standing.

Organized Labor Must Take Its Stand Squarely Against Such Criminality or Be Outlawed by Public Opinion.

[The Tulsa Okla. World.]

Additional details but paint in higher light the awful crime which has been committed in the Illinois coal fields. It is now certain that the local authorities, even the population of the vicinage, were particeps criminis, accessories after, if not before, the fact. So that no hope exists that those responsible for this crime will be brought to punishment by the agents of government directly charged with the enforcement of the law and the defense of the private citizen and his property.

Yet unless there is punishment for these criminals, unless the law exerts itself and demonstrates its superiority over the irresponsible criminal class responsible for the crime, then government had as well close its doors, take down the goddess from the temples of justice, and confess itself impotent to deal with organized crime.

While nothing is to be expected from the duly constituted officials of Williamson county—that dark blotch on America which takes pride in calling itself "bloody Williamson county"

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—there remains the sovereign state of Illinois of which Williamson is a subordinate part, and the federal government of which Illinois is a subordinate part, in a matter of this kind at least.

Are these two authorities, enjoying concurrent jurisdiction, going to recognize the impossible doctrine, that the public opinion of mere locality measures the constitutional rights of citizens? That is precisely what is demanded of both jurisdictions. Williamson county and its red-handed murderers are defiant of constitutional government. Williamson county demands that it be let alone—by both state and nation—to measure out the kind of justice that suits its people, regardless of the written law and the American Bill of Rights which was purchased at tremendous cost.

Organized labor is facing a crisis at this moment. It cannot afford to remain silent nor in the slightest acquiescence in this massacre which has shocked a hundred million people and brought them to their feet in vigorous protest against such outlawry and wantonness. The leaders of organized labor, if they value public opinion, if they have any pride in and for their own movement, must take their stand squarely for law enforcement in this crisis, squarely in favor of swift punishment for the murderers of "bloody Williamson county," or prepare themselves to find their organization outlawed by a sentient public opinion.

Joe Picavish, the lone union miner killed in the conflict, and killed during the time the beleaguered nonunion men were being sniped at, was followed to his grave by 5000 citizens, a brass band and a hundred motor cars, while on an adjoining hillside 19 hapless victims were buried like criminals, unattended, unhonored and unsung. Williamson county boasts that it is 100 per cent union. What, then, has unionism to say to this picture it has painted?

And what have the four Protestant ministers to say about the whole affair? We read that the 19 victims were officially consigned to the dust by a Presbyterian, a Methodist, a Baptist and a Christian minister, "who then hurried away to their waiting flocks." Is a so-called Christian nation to understand that these ministers of the gospel are also in tender sympathy with the thing which occurred in Williamson County?

There remains only the state of Illinois and the Washington government from whence to expect anything in the nature of justice. And unless that expectation is realized and the perpetrators of this wanton massacre and open defiance of government are brought to justice, organized government has sustained a wound from which it can never recover. "Bloody Williamson county" will have merely established a precedent which other union centers will speedily emulate.

The Lesson of Herrin.

[Tampa Daily Times.]

For a time our policy of unrestricted immigration worked well enough. The first people coming to us were sturdy, industrious people from northern Europe, from England, Ireland, Germany and the Scandinavian countries. They were homeseekers and homebuilders, with a land hunger which could not be assuaged in the countries from which they came. They did not seek the congestion of the cities, adding to the overcrowded conditions where life was a continual and hopeless struggle for mere existence. They went to the great prairies of the west where land was abundant and labor was scarce and by their industry and economy built themselves homes and became good citizens. The famous Melting Pot did its work efficiently and well.

But an unfortunate change in conditions came about. The success of these early adventurers was noised abroad through all Europe, in the slums of Russian cities, the vine-clad hills of Italy, the bazaars of Constantinople and the Far East, even to China and Japan. The result was an immense increase in the immigration flood, which brought with it the scum and dregs and outpourings of the slums of the old world. Agitators, anarchists and communists, who brought with them their destructive doctrines, to a land where they could be preached without let or hindrance to whoever could be found to listen to them.

At first they sought the congested centers of the cities, where the hard conditions of life got them ready listeners. But they did not stop there. The compact organizations of workmen and women offered them a ready means of preaching their vicious doctrines, and they wormed themselves into those organizations, where they taught their malicious creed from man to man. With real American workers they made little progress, for the American worker realizes that his real safety lies in the orderly processes of law, but the ranks of labor contain millions of foreign born, who have brought to this country their old world ideas that all forms of government are tyrannical and oppressive, and

ought to be resisted and done away with. They listened greedily to the agitators in their talk about "direct action" and the effectiveness of dynamite bombs as a means of redress for their wrongs. The horrors of Herrin are the legitimate result of anarchistic teachings.

It is for the Government now to put the emphatic stamp of its disapproval on such criminality. Every man who took part in the Herrin mob which hounded innocent men to their death, was an actual or potential murderer, and should suffer the penalty of murder. It is no time for lenity, unless we are ready to relapse into primitive barbarism and anarchy. Every resource of government should be used to the limit to bring these ruthless murderers to their doom. And hereafter we should exercise more care—a great deal more care—regarding those whom we admit to this land of liberty. They must be those to whom liberty does not mean license to murder and destroy. This fair land must not be Russianized or Mexicanized. It must remain a land of law and order where the rights of all are regarded and protected at any cost.

The Festival at Herrin.

[Greenville, S. C. News.]

Following the verdict of the coroner's jury in Williamson county holding the managers of the coal mines responsible for the horrible massacre of innocent men and women, the people of Herrin held a carnival across the street from the hospital where wounded strikebreakers who had not died lay recovering from their injuries. According to the Associated Press dispatch, "laughter and jokes floated across the summer night; paper caps adorned the heads of the gay throng, and last week's incident was forgotten in the gladness of social intercourse." The occasion, the story continued, "was the installment of a local chapter of an international club. It began with a parade and a band blaring dance music from a truck. The mayor was there, and the chief of police and all the local dignitaries."

Thus another chapter is added to the gruesome details of a crime that has shaken the foundation of this nation—a tragedy paralleled only by the larger catastrophe that has taken place in Russia. What the parade really signaled was the triumph of a bestial and murderous minority over law and order. Among those who took part in the parade very likely were the jurors who placed the guilt on the managers, a verdict as preposterous as that which would put the burden on a store-keeper for setting temptation in the way of a burglar. Nor was it a surprise to note that the mayor, chief of police and other officials were present; throughout the unfolding of the tragedy their course has been marked either by disloyalty to law or cowardly fear of the miners.

Evidently the people of Herrin believe the tragedy is over and have gone out to forget the incident with debauchery and dissipation as the Germans used to dull their conscience with wine after slaughtering Belgian women and children. "Just trying to forget last week's unfortunate event," some of the participants explained. That may be a way for them to forget it, but for the nation that looks on at this grim spectacle the only way it will be forgotten is for the murderers to be brought to the bar of justice and punished. If there were any honorable people in the town they did not take part in the parade—unless perchance they did so only from fear of having their lives taken. The mayor and chief of police, entrusted with the enforcement of the law, rubbed elbows and joined in the hallelujah chorus with those they should have been leading to prison cells.

If the Herrin crime is to go unrequited then bolshevism has been established firmly in one community in the United States and will spread to others. It is not a local case in any sense of the word. It is not "our affair" to be settled in "our way" as citizens of Herrin defiantly declare. It is an outrage that strikes at the roots of the sovereignty of Illinois and of our national government. The fact that the outrage was committed in the name of unionism does not excuse its criminality. The union was no more commissioned to commit crime than were the strikebreakers; its members are to be no more excused from murder than private citizens. The union card does not carry the right to kill nor to make any gain except through the regular processes of law which guarantee equal rights to all citizens, regardless of their affiliations.

Is the precedent to be established, that if a man quits a job he may kill the men who succeed him, "kill him openly, make a joyous festival of him, and be above and beyond the law?"

That is the question to be decided by the state of Illinois. For the atrocity of Herrin to go unavenged is to float the union flag above the stars and stripes.

All Quiet At Herrin.

Under the above heading the Miami, Florida, Herald tells of men being murdered because they were willing to work and says:

It may very readily be granted that "all is quiet" at Herrin as stated by a military officer sent to that place to report on conditions there after the massacre of last week.

And why should not things be quiet at Herrin? A mob of five thousand frenzied men attacked and killed some two scores of other men working at a mine and drove the remainder away. Who is there to criticize or oppose the action now at Herrin?

It is reported that the sheriff is a man without courage; the military gentleman who reported on the incident pleasantly said he "had no guts." The people there are satisfied with the conditions of things and are perfectly willing to forego any investigation that may possibly be started. A one-legged man has been arrested as an assailant, and all is quiet in Herrin.

On the face of things, the men who were killed or harried out of the vicinity of Herrin were men seeking work. They had labor to dispose of and they were offered positions at the mines where other men had voluntarily abandoned their positions. Opportunity was given them to earn wages by which they might support themselves and their families. The constitution of the United States and, we presume, the constitution of the state of Illinois, guarantees every man the right to labor where employment may be found and also attempts to guarantee that he shall not be deprived of life, liberty or property without due process of law.

So far as is known, the men who made the attack on the mine workers were those who sometime ago, dissatisfied with conditions, had relinquished their jobs and had gone on a strike. They assumed that, notwithstanding they had thrown up their positions, those positions were still their property and that they had the right to defend them even to the taking of human life by wholesale.

That is a pretty clean proposition for civilization as it exists in Illinois to consider. Are men, however numerous, to take the law into their own hands or is the law to prevail? That is the question.

Among those who were killed by the ferocious and merciless mob was one who, evidently had served his country in the trenches during the great war. It was supposed, he probably supposed, that he was fighting to make the world free from just such violations of law. He served his country well and returned only to lose his life at the hands of a mob whom neither his state nor his country is attempting to apprehend and punish.

All is quiet at Herrin. The dead soldier has no complaint to make. The many dead are at peace; the living, having no further enemies to destroy are content; the officers of the law are resting comfortably under the assurance that the commanding peace officer hasn't the guts to enforce the law; the state of Illinois is busy with other affairs; the United States government is only incidentally interested, and all is quiet at Herrin.

The Most Dangerous Assault Ever Made In Our Country Upon Constitutional Government.

The Wall Street Journal warns the nation against the meaning of these crimes and says:

Never in the history of the United States has there been a more dangerous assault on constitutional government than the destruction of property and executions of workmen without warrant of law, at Herrin, Ill. And yet, a member of Congress, sworn to uphold the Constitution, has lifted his voice in defense of this crime.

The speech is published in the Congressional Record of June 26, beginning at Page 10193. Edward E. Denison, from the Twenty-fifth District of Illinois, which includes Williamson county, is the Congressman who has performed this unenviable task of defending a crime that not only horrifies the whole country, but strikes at the very foundation of our system of government.

"There was a combination of circumstances," he says, that "aggravated and embittered the miners." From his speech those circumstances seem to be as follows:

"That the company was beginning to operate and mine coal contrary to an agreement alleged to have been made with the miners.

"The miners had been out of employment for three months.

"They were hungry; their families were hungry, and

their places were being taken by imported nonunion labor.

"Private guards, armed with machine guns and rifles, were parading about the property of the company challenging and threatening all who approached.

"The killing of one of their number by one of the men in the mine, all so embittered and enraged the miners that the more conservative ones who were trying to settle the situation in a peaceable way seemed to have lost control and the more radical among them took the law into their own hands."

If every one of these statements is exactly correct the situation is not changed one iota. An unlawful, tumultuous assembly of armed men, leading to riot and murder is not to be explained by such facts. Neither is it necessary to say that if the rioters had been out of work for three months, it was because of their deliberate choice, and that, under our constitution the murdered men had the right to take the places that they had vacated.

An armed mob assembled in Herrin and marched out to the mine. The men took positions on the hillside where they could shoot down into the mine property. Can nonemployment or hunger excuse that? They dynamited and burned the mine property and tore up the trucks; they put to death at least nineteen men whom they had taken prisoners and injured others, notwithstanding the fact that the Constitution, which Mr. Denison has sworn to uphold, provides that no man shall be deprived of life, liberty or property without due process of law.

Had those rioters any warrant of law authorizing them to commit that deed? If they had not then every one of them is guilty of murder. Mr. Denison knows they had no such authority, for he says "they took the law into their own hands." And then in the next breath he adds:

"The laws of our country must be supreme and must be respected and obeyed if our government is to survive."

He has shown the issue. Unless the people assert the majesty of the law, our government must come to an end.

State of Illinois on Trial as Result of Cruel and Wanton Slaughter.

The Memphis Commercial Appeal, says:

As a result of the cruel and wanton slaughter of over a score of defenseless men near Herrin and the wounding of many more, the great State of Illinois, within whose borders the terrible tragedy was enacted, stands on trial before the whole nation. And the manner in which the law enforcing officials of the county and state proceed to punish the crime already committed, coupled with the results achieved, as well as their procedure and success in preventing any further outbreaks, will be the basis upon which public opinion will form its judgment as to whether that commonwealth is an honest, fearless and efficient agency for the preservation of peace and order and the enforcement of law.

Murder Is Always Murder.

The Greensboro (N. C.) Daily News concurs in the views of the White House in its answer to a question regarding the massacre at Herrin, Ill., that: "Murder is murder, wherever committed and by whomsoever committed, and there is no extenuation."

Criminality Is Contagious—What Is Illinois Going to Do About It?

The New Orleans Times-Picayune, says:

As was to have been expected, the savage outbreak at Herrin is followed by lesser outrages in other places. A working miner was assassinated and one of his comrades wounded at Uniontown, Ohio, Tuesday morning. Two coal tipples in West Virginia were blown up by dynamite the same day. Herrin's bad example is contagious and the apparent inaction or indecision or delay on the part of Illinois does not go unnoticed, we may be sure, by the agitators who instigate these crimes.

What is Illinois going to do about it?

A Severe Blow to Union Labor Cause.

The Nashville Tennessean says:

The cause of union labor suffered a severe reverse in the rioting and bloodshed at the coal mines near Herrin, Ill.

The American people are not yet ready to lend approval to the rule of the mob.

The taking of human life is a crime. When it is done in

the name of an organization or a cause, it indicates the entire membership.

* * *

There were two rights involved at Herrin. One was the right of the mine owners to work their properties with any men they could get to do the job, and the other was the inalienable right of the American citizen to work where and for whom he will at any wage he is satisfied to take.

Holda Illinois Responsible.

The San Antonio Express also puts blame on Illinois for the Herrin Massacre when it states that:

In effect, a great, powerful State has bowed abjectly to terrorist mob rule. What would have happened had a courageous sheriff, backed by a determined Governor, handled the Herrin situation, readily may be imagined. It will be recalled how Hon. Calvin Coolidge electrified the country by his masterly stand in the Boston police strike, when he was Massachusetts' Governor. Such instances might be multiplied. Mobs invariably quail before a display of righteous determination. Public sentiment instantly rallies to the official who dares discharge his duty and uphold the law. Unhappily, that sort of stamina is none too plentiful in high official.

Where Did These Strikers Get the Idea That They Had the Right to Murder the Miners Who Took Their Jobs?

The Morning News of Dallas in commenting on a man's right to a job says:

It can scarcely escape notice in reading the story of what has just taken place at Herrin, Illinois, that the feeling of the striking miners toward their former jobs is that of proprietorship. The report of the coroner, the general sentiment of the community and the spirit of the whole affair show that these men are under the impression somehow that they have the right to murder at will those who "rob" them of the jobs which they quit in obedience to the strike order of their union. It seems to be their idea that the use of force in the defense of their jobs—even after they have voluntarily ceased from labor at them—is on the same plane as the use of force to expel intruders from a residence temporarily departed from.

Such Crimes Must Not Go Unpunished.

The Tampa Daily Times denounces these fiendish outrages but says "organized and unorganized labor as well as law will be swift to denounce and decry this terrible affair." But we have seen no intimation that organized labor will do anything of the kind and the MANUFACTURERS RECORD offers the full use of its columns for any resolution of denunciation of this crime which any labor organization will adopt. The Times says:

The statement has been made that those responsible for the mine war near Herrin, Ill., which resulted in the massacre of 40 or more persons, have no apparent apprehension that a day of punishment is in store for them. They seem to regard the affair as one that concerns themselves alone and no one else.

This, needless to say, is a very greatly mistaken idea. Every law-abiding citizen of the country is, or should be, interested to the extent that he must feel that it is necessary that those who precipitated the bloody riot shall be brought to justice. Furthermore, it is a duty incumbent on the great commonwealth of Illinois to see that this is done. It must act in its sovereign capacity to bring punishment down on the heads of the Herrin murderers or stand forever disgraced in the eyes of the world.

Also it is an affair in which the government of the United States is concerned. It does not mean that such crimes shall be committed anywhere that it exercises authority, and if necessary it will probably insist that the state of Illinois proceed to punish the guilty. But it will hardly be necessary for it to urge action since the state government cannot otherwise than realize its duty in the respect mentioned. It must proceed against those responsible for the massacre and there is not the least reason to think it will fail to do so.

Organized and unorganized labor, as well as law, will be swift to denounce and to decry this terrible affair. No man nor set of men can think of the Herrin massacre without crying out against the maddened murderers who let passion enslave brutism in their hearts and fiendishness in their brains. All real men will be quick to give their every help

to punish and to make an example of these men who turned to beasts and gloated over the blood and the life-taking and the suffering of their fellow creatures.

What of America?

The horrible crime committed against humanity at Herrin, Ill., causes the Kansas City Times to ask: "What of America?" and it adds:

They have buried their dead in Illinois, and American civilization is composing its face to that bland expression that has come to be its main reliance against all questioning, all charges and all doubts.

But questioning and doubt are not buried. They can neither be shot to death nor assured by the smooth countenance of society through whose hasty make-up show the scars and ulcers of a raging disease.

Americans must answer the question, what of America? It is being asked today all over this broad continent; asked by Americans; asked in shame, humiliation and fear. Their country, their democracy, their laws, institutions and civilization are under indictment and the indictment goes unanswered.

Only the other day we sent the flower of our young manhood across the seas to fight for liberty. Did we send them to the right place? Was our liberty secured on those European battle fields, or is it here at home that it faces an enemy in arms?

Obedience to law is liberty. So stands it written over the door of our court houses. Can Americans read that solemn injunction and fail to acknowledge to themselves that tested by it there is no liberty in America?

There is no liberty where there is no law. There is no liberty where there is no protection for life or property. There is no liberty where there is no respect for human rights, where justice cannot be invoked both for the security of society and the punishment of its enemies.

What of America?

The Vital Question Is Whether This Government Is to Survive.

The Charlotte News believes that:

The largest issue raised in connection with the Herrin, Illinois massacre, has to do with nothing less vital than whether or not government is to survive. The claim has been set up for those guilty of taking the lives of miners who were employed in a legitimate enterprise that they were acting within their rights. It so happens that 'within their rights' in this instance is beyond the pale of orderly government. They had no license from anybody to put folks to death. They killed miners because miners were working in their own stead and after they themselves had refused to work.

If it is lawful for a mob to take human life in Williamson county, Illinois, it is just as lawful for miners in West Virginia to resort to this same practice in order to keep the miners cleared of workers not affiliated with their organizations. And if it happens in West Virginia, it could happen here or anywhere else, in any community, in any industry. Why not everywhere, as a matter of fact? If government, if the laws and the usual processes of the courts, are to be ignored in one point in the United States, why not at all points.

The Lowest Depths of Criminality.

The Tampa (Fla.) Morning Tribune tells of the bravery of unionism in the following which is almost too horrible to be true:

Brave men! They dragged their defenseless prisoners two miles and forced them to climb through barbed wire fences, and shot them in the back as they struggled through, cut their throats as they fell to the ground, and beat to death with revolver butts the crippled and wooden-legged ones who could not keep up with the death march. Then they convened their coroner's jury and 'found' the dead, mutilated, victim of their own hellishness responsible for his own, and the death of two score others!

With every mail come additional bitter denunciations of the lynching of the law at Herrin, and the assumption of superiority to all law but labor law by the union miners there responsible for the murders of the steam shovelmen and others who had incurred the enmity of president John

M. Lewis and local officials of the United Mine Workers of America.

At least four angles present themselves in this matter, one, the unparallel brutality of the men and women who participated as actual murderers or sympathizers in the fiendish work of the executioners; two, the utter defiance of the law and legal processes which the entire population of Williamson County seems to hold or at least tolerate; three, the timidity or inability of authorities outside of Williamson County to bring the murderers to trial, and fourth, the position taken by these United Mine Workers that not only is their union law more sacred than any other laws, statutory or divine, but that any imaginary rights of one class of organized and unionized labor may be made paramount by using any means that animal strength or advantage of numbers makes possible.

Extracts from some of the later comments on the case include the statement by the *Houston Post* that "the infuriated men who attacked the strike-breakers, and then murdered and mutilated them after they had surrendered, struck a deadly blow to civilized government in the United States. They tramped underfoot all law, statutory, moral and divine, and became veritable beasts of the jungle. 'There must have been entire disrespect for the government of Illinois,' says the *Savannah News*, 'else no one would have dared to begin the attack on the mine. Men had become victims of the idea that they could take their affairs into their own hands, punish whom they thought were their enemies and inflict the punishment in any horrible way they pleased. Illinois should make such an example of them that never again would any group of men in that state attempt anything of the kind.'"

The El Paso, Texas, *Times* asks "Do the laws of the state of Illinois and of the United States of America skip Southern Illinois?" and adds "If nonunion men, seeking only the right to work, go into such territory, who shall blame them for taking arms and machine guns along? They are entitled to protection of their lives. The trouble, apparently, was that they did not take enough guns." "The real issue is" says the *Tulsa World*, "whether an American citizen may enjoy his rights as such without first consulting the labor oligarchy."

"Illinois is an anarchistic state," declares the *Tampa Daily Times*, and asserts that "this ugly charge will stick unless prompt steps are taken by the state to refute it. There is, but one way to disprove it, and that is for the whole power of the state to be exerted in the prompt arrest, speedy trial and adequate punishment of the bloody-minded mob that murdered in cold blood, with circumstances of more than Russian brutality, upwards of 40 men, whose only crime was that they were exercising their God-given right to labor." The action of the coroner's jury in condoning the wanton savagery of the murderers is denounced as wholly indefensible by the *Tampa Tribune*, which recalls "that these 'prisoners of war' were tied together and then shot down mercilessly; it is not denied that some of these men were hitched to motor cars and dragged into a pulp, even after their bodies had been filled with lead; it is not denied that wounded men were spat upon by women and children and refused even a drink of water." "The brazen partisanship of the coroner's jury at Herrin emphasizes the danger of permitting any one group to control the agencies of government which pretended to investigate the murders," says the *Houston Post*.

The Logan, (W. Va.) *Democrat* contrasts conditions in Illinois with those which prevailed in West Virginia last year, when non-union miners were protected by armed military forces from an attempted onslaught by union miners, which if unopposed, would without any question whatever have resulted in massacres as bloody and brutal as those which were perpetrated on their defenseless victims by the union mine workers at Herrin.

NON-UNION MINED COAL HAS SAVED THE NATION.

The Manufacturers Record's Staff Correspondent Begins an Investigation of Situation.

[West Virginia and other Southern States, through coal mined by independent or non-union men, have saved the nation from complete domination, and the shutting down of factories for lack of fuel, and the inability of railroads to run. It has been Southern coal mined by non-union men that has saved the situation. Recognizing the great importance of this to the entire country the MANUFACTURERS RECORD has sent a member of its staff, Mr. Albert Phenix, into West Virginia to tell the story in full. The following is his opening dispatch. A full report from him on the whole subject will appear in next week's issue. Editor, MANUFACTURERS RECORD.]

Special Dispatch from ALBERT PHENIX, Staff Correspondent.

Charleston, W. Va., July 10.

West Virginia's production of coal for the week ending July 1 was slightly under 1,350,000 tons which is not quite 200,000 tons below average normal production.

These are Coal Association figures shown me today on my arrival in West Virginia to begin a study of the present coal mining situation in this state. The MANUFACTURERS RECORD has pointed out that the coal mines of the South are saving the country in the present coal strike. I find that those West Virginia mines which were non-union before April 1 and are still non-union, namely, those in the Pocahontas, Tug River, Kenova-Thacker, Logan and Wind-ing Gulf fields are shipping far more than normal average. The former union fields of Kanawha, Fairmont and New River, operating now as non-union, have been steadily increasing production. As an illustration, in the Kanawha District where there are 272 mines, there were eight in operation with 149 men working the day of the strike, April 1. Today there are 109 mines in operation with 3700 miners at work.

In the New River field all of the 123 mines are in operation. Of 550 mines, wagon mines and all, in the Fairmont District, 160 are in operation, but they are so well manned that a production of 181,500 tons was shown for the week ending July 1, as against normal average of 270,000 tons.

In proposing another commission to arbitrate the coal strike, President Harding today asked that idle mines, 'resume activities without interference with activities of mines now working.'

As West Virginia is now active in every district, 'no interference' is all that is required to bring capacity production within a few weeks, so it is declared, or at least production equal to the carrying capacity of the railroads, for even now, some of the busiest districts are menaced with a car shortage. President Harding promises that the Government will force no man to employ men against the free exercise of an employer's rights. It is declared here that every mine in West Virginia will be in operation within a few weeks, if operator and men are alike secure in this assurance.

Many members of the United Mine Workers are dropping out and asking for work, frequently in some other mine or field than the one where they have been working. Others are holding out on the promise of their leaders that the Government will soon step in and order their employment at the fat old wages and everything else they want.

It is important that these people should clearly understand just what the Government does not propose to do for them. Some of these men have families, and because of the hope held out to them by their leaders, they are attempting to keep themselves and families alive on the meager

strike benefits the United Mine Workers Association now doles out to them. Rather than accept the work that is open, they and their families prefer starvation, and this situation is the foundation for the recent rabid attacks on West Virginia by Rabbi Wise and other sensation mongers and corporation baiters.

Conditions in the West Virginia coal fields cannot be comprehended at a glance or from afar. Having been a resident for several years of West Virginia some years ago, in close touch with every industry in the state, I recommend that all who would speak or write on the subject come here to get the facts and to know the people. Speaking today of the Herrin horror, it was pointed out that if the movement had not been made in West Virginia to turn back the invading United Mine Workers last year there would have been a worse than Herrin massacre of non-union miners in the Mingo and Williamson fields.

"Yes, but if anything like the Herrin atrocity had occurred here," another said, "the work of the coroner's jury would have been chiefly to pass on the manner in which the murderers came to their end. There was some sympathy here with United Mine Workers a year ago; today there is none. If another march on Logan County were to be undertaken by Union miners today, the whole State would volunteer to help the authorities to stop it."

ETHICAL STANDARDS ESSENTIAL TO THE GREATEST SUCCESS IN BUSINESS.

"**E**THICS in Business" was the title of an address by Judge Elbert H. Gary, chairman of the United States Steel Corporation, at Northwestern University, Evanston, Ill., recently in which he presented a number of very impressive ideas concerning the moral law in connection with business enterprise, also demonstrating conclusively by citing sundry instances the fundamental truth of the old adage: "Honesty is the best policy."

After observing: "There is a widespread belief that a very large percentage of business is carried on without any regard to ethical questions," and citing various comments of the past and the present concerning the business and the social conduct of men, and acknowledging that not many years ago managers of some large corporations apparently believed that if their conduct was within the law it was immune from attack, Judge Gary went on to say:

"It may be asserted with absolute confidence that within the last twenty years or more there has been a decided change in the standards and conduct of business. To my personal knowledge, many of the most intelligent managers of business affairs, some very large and others smaller, who have laid down the cares and difficulties of this life, before their final departure completely changed their opinions and reversed their methods concerning ethical questions. This applies also to many who are still living. Hundreds upon hundreds, yes, thousands upon thousands of business men, all over this country, who twenty years ago believed that the subject of ethics had little if any rightful place in business conduct, now assert and insist that it is essential and controlling. A man of high intelligence and probity about ten years since, while testifying in court, alluding to a certain other man who occupied the highest position in a large business concern, said: 'He introduced new rules into the business game.' I think it properly may be claimed that multitudes of leading business men during the last two decades have voluntarily devoted more and more time and energy in a conscientious desire to conduct their business in accordance with the rules of propriety and honesty.

"Business throughout the United States is today transacted on a higher plane than ever before, though of course there is always need for further improvement. The world is surely growing better. If time permitted, many striking instances could be given.

"The large majority of business men now conduct their affairs in accordance with the avowed belief that right is superior to might; that morality is on a par with legality and that the observance of both is essential to worthy achieve-

ment; that the rights of customers must always be respected; that employees are associates rather than servants and should be treated accordingly; that stockholders of corporations, as well as all partners, are entitled to any information immediately upon receipt of the same by any officer or partner, so that under no circumstances can there be preferential rights or opportunities; that destructive competition must give way to humane competition; and that full and prompt publicity of all facts involving the public weal is demanded."

Judge Gary gave great credit to President Roosevelt for having established a strong public opinion in favor of honest business management, and because he with his many disciples and their assistance was able to make that accomplishment.

"Public opinion," Judge Gary continued, "has aroused and will always arouse the consciences of men and women. We cannot sleep or eat well, and we cannot for long enjoy life in the face of the opposing will of the majority, and this is true of most persons, including the vicious and depraved. We dread the condemnation of the general public, especially if there is reason for it.

"We object to fulsome praise, even from our best friends, but we shrink and suffer from deserved adverse criticism. This natural instinct in the hearts of well intentioned men and women has had a decided influence in reforming business methods. But it may be added with propriety that many self-appointed and self-styled reformers, who never took any interest or action in regard to business or its reformation until long after it was voluntarily reforming itself, have been conspicuous in claiming credit. They were Pharisees offering prayer on the public streets.

"There is another convincing reason for the noticeable changes resulting from the adoption of ethics in business. While the motives are not equally worthy with others, they are very practical and influential with many who would not otherwise be converted. Ethical management brings additional profits to business. Sooner or later it pays in dollars and cents. Any man or concern that firmly establishes a reputation for honesty and fair dealing which is not questioned has a business asset of great pecuniary value and profit."

"In the United States the door of opportunity for progress and prosperity is open to all; but to reap the full advantage one must be actuated by the principles of morality."

Judge Gary furthermore said that conscientious treatment of employees which secures their respect and confidence will tend to increase their loyalty and efficiency and that in every particular a contented workman is far superior to one who is dissatisfied and disgruntled. One corporation alone during the past ten years has appropriated nearly \$100,000,000 for welfare work in behalf of employees, including establishment of churches, schools, homes with gardens; recreation grounds and buildings, hospitals, sanitary and hygienic facilities, safety devices, accident relief, old age pensions, etc.

"From considerable experience," he added, "I assert with confidence and emphasis that, taken as a whole, year after year, the pecuniary gains of a large or small business will be greater if it is fairly, humanely and honestly conducted. If this be true, it alone furnishes a logic to everyone which should be conclusive."

In bringing his address to a happy and convincing conclusion Judge Gary also said: "As a passing suggestion it may be observed that henceforth the political party which pays the most attention to ethics is likely to secure endorsement by the majority of voters, including especially the women." He added too that the alumni of great universities have a fine opportunity to aid in molding the new and improved structure of enlightenment which is needed throughout the world.

EVERY AUTOMOBILE IS A RAILROAD STRIKE BREAKER.

RAILROAD strikers probably overlook the fact that there are 12,000,000 automobiles and trucks in this country and that they are being produced at the rate of 250,000 a month.

Every automobile is a railroad strike breaker which cannot be browbeaten or bulldozed or murdered.

NO MATERIAL INCREASE IN WORLD'S COTTON PRODUCTION IN LAST TWENTY YEARS.

COMMENTING on the indications as to the cotton crop of the current year, the Department of Agriculture issued this statement on June 17:

"The week's news increased the trade's apprehension as to the ability of the South to produce a supply of cotton sufficient to meet the world's needs for the coming season. The large surplus which existed at the beginning of the present season is disappearing rapidly and the world's rate of consumption of cotton is gradually approaching the pre-war level."

Renewed anxiety as to the ability of the United States to continue its usual supply of cotton to the textile industry is felt in many quarters. Leaders of cotton manufacturing in Europe have been issuing warnings of an impending cotton shortage should the South fail to produce a normal crop this year. The reason the world cotton trade is so interested in the South's cotton crop is clearly shown in the following tabulation of the National City Bank of New York which gives the percentage which the United States has supplied of the world's cotton since the year 1800.

World Cotton Production 1800 to 1921 and Percentage of Crop Produced in the United States.

(In bales of approximately 500 pounds.)

Annual Average	World	United States	All Other	Per cent U. S. A.
1800-10	1,060,000	140,000	920,000	13.20
1811-20	1,172,000	231,000	941,000	19.70
1821-30	1,541,000	566,000	975,000	36.72
1831-40	2,317,000	1,123,000	1,194,000	48.46
1841-50	2,692,000	1,953,000	739,000	72.54
1851-60	4,216,000	3,242,000	974,000	76.89
1861-70	5,027,000	2,136,000	2,841,000	43.48
1871-80	6,810,000	3,623,000	3,187,000	53.20
1881-90	7,812,000	5,038,000	2,776,000	64.46
1891-00	9,224,000	5,867,000	3,357,000	63.60
1896-90	11,602,000	7,232,000	4,370,000	65.73
1891-95	12,149,000	8,041,000	4,108,000	66.18
1896-1900	15,162,000	10,081,000	5,081,000	66.48
1901-05	18,070,000	10,801,000	7,269,000	59.77
1906-10	20,956,000	11,847,000	9,108,000	56.53
1911	24,723,000	15,693,000	9,030,000	63.47
1912	24,158,000	13,703,000	10,455,000	56.72
1913	25,796,000	14,136,000	11,660,000	54.79
1914	26,022,000	16,135,000	9,887,000	62.00
1915	22,175,000	11,192,000	10,983,000	50.47
1916	22,678,000	11,450,000	11,228,000	50.48
1917	27,970,000	11,302,000	9,668,000	53.89
1918	24,461,000	12,041,000	8,420,000	58.84
1919	23,023,000	11,421,000	11,602,000	49.60
1920	21,787,000	13,440,000	8,347,000	61.68
1921	15,593,000	8,340,000	7,253,000	53.48

This statement calls attention to the fact that cotton has become the world's chief reliance for textile materials, the quantity produced in the world in 1920 having been 17 times as much as in 1820, while the production of wool in 1920 was but 5 times as much as a century earlier. Meantime, despite the efforts made in the past 100 years to develop cotton production in other parts of the globe, the United States has so increased its share of the world's cotton crop that we were in 1920 supplying nearly 62 per cent of the world's raw cotton output as against less than 20 per cent a century earlier. With the abnormally small crop last year our share of the world's 1921 output was 53 per cent which is but slightly below the average of the previous twenty years, of about 57 per cent. And this of course means that the South produces over half the cotton of the world, and upon this section's ability to supply cotton rests the future of the textile industry and allied trades, and the millions dependent on them. Give the South a living wage and profit on its cotton and these millions will never go hungry for lack of raw materials.

On July 3, the Agricultural Department estimated that the area of cotton in cultivation this year (1922) in the United States was about 34,852,000 acres, an increase of 3,174,000 or 10 per cent over last year's acreage. Based on this acreage and the condition of 71.2 per cent of normal on June 25th, the Department forecasts a total production of about 11,065,000 bales. The American Cotton Association for this year estimates a maximum of 10,781,000 bales produced on an estimated acreage of 33,693,000.

SHOCKING SABOTAGE IN KANSAS.

ONE of the most outrageous instances of sabotage crimes has developed in Kansas during the present harvest season. Dispatches from Topeka say that when the season began everything was peaceful, but within a few days eleven organizers of the Industrial Workers of the World appeared throughout the State to persuade men to insist upon higher wages and improved working conditions, striking if need be. It is alleged that these organizers distributed among the harvest hands incendiary bombs containing phosphorus so prepared that it would explode within two or three hours after being planted in a barn or in a stack of wheat, causing serious losses to the farmers, the intention being to use these "kitties" as they are named, to coerce any employer who refused to comply with demands. Two men arrested at Hutchinson with bombs in their possession, may go to the penitentiary for long terms; there are already several men in the state prison, sent there for urging farm hands to burn crops and buildings during previous harvests. This year, it is stated, eleven men have thus far been arrested, most of them for vagrancy when it was found that they refused to work. It is expected that many others will be taken into custody before the harvest ends. Any organizers preaching sabotage are to be severely dealt with. The regular pay is from \$3.50 to \$4 a day but the I. W. W.'s ask for \$5.

This incendiary work on farms recalls a series of barn burnings which occurred 30 or more years ago in the western part of Maryland and in the southern part of Pennsylvania adjoining. Some individual with a craze for incendiarism obtained phosphorus, it was stated, and enclosed it in eggshells from which the original contents were withdrawn. These prepared bombs, innocent enough as to appearance, were buried in haymows and after a short while would explode, set the hay afire and the barn would burn down. A number of conflagrations occurred in this manner before the mode of operation was detected. In every case the criminal was able to make his escape.

INTERESTING ASSOCIATES FOR SOME AMERICANS.

THE Dearborn Independent in a recent issue says that in one of the typical cities of the country a grand jury recently indicted 67 individuals for violation of the Prohibition enforcement laws, and gives a list of them as follows:

Anthony Beniusin, Joseph Dertz, Walter Sikorski, Joseph Podsiad, Gustave Christian, George Levinson, Tony Buholtz, Mickey Moore, William Moss, Nicholas Weins, Mark Sheridan, Paul Dorrington, Joseph Roberts, John Drugnitski, Solomon Miller, Fred Kinniker, David Spaight, Sol Marks, Roy Pask, John Welling, August Meier, Pete Crevar, Frank Stefano, Anthony Graska, Edward Shively, William Nykiel, John Wagner, Angus Graves, Jacob Roe, Chester Britz, Frank Montie, Emmet Billingsley, Henry Noisson, William Trappe, Frank Johnson, Peter Jankowski, John Schlifke, George Rakich, A. C. Herz, William Ernie, Albert W. Woodruff, Charles Kosnick, Sam Kosnick, John Perry, alias Jos. Perry; Edward Champagne, John Persenski, Anna Wysocki, Justin Krivick, Leo Paziker, A. C. Hertz, James Williams, C. J. Hamill, Daniel Ginsberg, John Pock, Robert Owens, Joseph Olschewski, Kamen Chirich, Anthony Lujeski, Albert Wrobel, Albert Mirowski, Charles Orange, Ernest Leonard, Alex Cohen, Dora Cohen, Richard Cohan, Rosa Popinski and Mrs. Augusta Koss.

It is needless to say that this list indicates that a large majority of these people are of that class of foreign immigration which has proven a curse to our country, and will continue to prove a curse so long as we permit the off-scourings of Europe to pour into America. And yet so-called reputable American citizens, men of standing and position, are co-operating with men of a character indicated by their names in seeking to break down our Prohibition laws.

Southern Construction Contracts for First Six Months of 1922

Almost Double the Awards for Similar Period Last Year—

Total is Nearly \$260,000,000.

Contracts awarded for construction work in the sixteen Southern states for the first 6 months of 1922, amount to almost double the valuation for the corresponding months of 1921. The total from January to June of this year is \$258,207,000 as compared with \$129,181,000 for the same period last year.

Contracts let in June were practically double the awards in June, 1921, amounting to approximately \$49,340,000.

The contracts to be awarded, as reported during the first half year, reach a total of \$536,638,000, as contrasted with preliminary announcements during the first six months of 1921 on construction projects to cost \$470,748,000. The totals representing contracts awarded and to be awarded for 1922 omit all building projects costing less than \$10,000 each. This means the omission on account of lack of space of thousands of dwellings which have been let to contract or planned for early construction at a cost of from \$1500 each and up. The detailed figures in the various classes of construction projects indicate the wide variety of work under way in industrial enterprises, in highway improvements, in the construction of schools, in churches, and in buildings of every description.

Road, paving, and bridge work stands out conspicuously with a total of \$66,707,000 for the first six months, representing contracts actually awarded. And accurately indicating the potential demand for such work is the total of \$123,669,000 in contracts to be awarded; plans are being pushed vigorously to have road contracts let during the summer months so that the work can be completed before winter.

Bearing out the general reports of the improvement in conditions everywhere is the total of \$63,937,000 representing contracts let for miscellaneous enterprises including industrial plants of all kinds, public utilities, hospitals, theatres, warehouses, garages, waterfront development, etc. More than \$125,676,000 is the total of contracts to be awarded for this character of work.

School building construction is actively underway on a large scale in most of the Southern states, the total of awards for the first six months of 1922 being \$32,429,000 with initial announcements of projects to begin in the future amounting to \$74,793,000.

Thus with only half of the year gone, construction contracts awarded are practically three-fourths of the total for the whole of 1921, and this despite decreased costs. The out-

look for a further steady increase in building work is excellent. The program as already announced practically insures continuation of the forward movement during the succeeding months of this year, the activity thus far surpassing anything the South has seen for years.

In detail the figures for June and for the first six months of 1922 and for 1921 are as follows:

COMPARATIVE RECORD OF CONSTRUCTION SOUTH.

COMPARATIVE RECORD OF CONSTRUCTION SOUTH.			
Contracts Awarded			
	1921.	1922.	
June	\$24,841,640	\$49,340,627	
May	22,630,100	58,338,434	
April	33,889,346	52,992,960	
March	25,361,577	40,617,831	
February	14,350,944	35,774,174	
January	8,107,757	21,143,479	
Total for six months	\$129,181,364	\$258,207,505	
Contracts to be Awarded.			
	1921.	1922.	
June	\$108,971,224	\$86,174,830	
May	84,752,130	81,176,960	
April	136,979,131	89,697,397	
March	87,916,333	123,488,397	
February	30,920,254	91,379,657	
January	21,209,800	64,720,995	
Total for six months	\$470,748,872	\$536,638,233	

SUMMARY BY CLASSIFICATION.

Contracts Awarded—1922.		
	June.	January to June inc.
Apartment houses and hotels.....	\$6,014,230	\$30,396,589
Association and fraternal.....	1,501,000	3,946,100
Bank and office buildings.....	3,065,000	17,628,473
Church buildings.....	867,790	8,875,090
City and county projects.....	1,370,200	5,107,238
Dwellings.....	2,209,700	8,935,872
Miscellaneous enterprises.....	6,648,150	63,937,252
Roads, paving and bridges.....	16,259,017	66,707,917
School buildings.....	6,399,050	32,429,187
Sewers, drainage and waterworks...	3,382,890	12,490,032
Store buildings.....	1,628,600	7,684,155
Totals	\$49,340,627	\$258,137,905
Contracts to Be Awarded—1922.		
	June.	January to June inc.
Apartment houses and hotels.....	\$8,833,150	\$41,663,700
Association and fraternal.....	2,136,500	18,969,044
Bank and office buildings.....	9,627,280	24,846,280
Church buildings.....	3,540,050	24,451,700
City and county projects.....	1,747,000	16,283,000
Dwellings.....	4,378,800	27,132,080
Miscellaneous enterprises.....	20,993,800	125,676,777
Roads, paving and bridges.....	19,323,800	123,669,702
School buildings.....	9,592,600	74,793,050
Sewers, drainage and waterwork...	2,230,800	43,963,850
Store buildings.....	2,771,050	15,189,050
Totals	\$86,174,830	\$536,638,233

RECAPITULATION OF CONTRACTS AWARDED AND TO BE AWARDED.

Contracts to be Awarded.					
	June 1.	June 8.	June 15.	June 22.	June 29.
Apartment houses and hotels.....	\$1,106,000	\$2,010,500	\$1,374,000	\$2,759,000	\$1,583,650
Associations and fraternal.....	933,500	413,000	500,000	140,000	150,000
Bank and office buildings.....	350,000	4,520,000	2,607,280	370,000	1,780,000
Church buildings.....	900,000	402,550	892,000	485,500	860,000
City and county projects.....	241,000	316,000	705,000	235,000	250,000
Dwellings.....	674,200	1,135,600	1,117,000	705,500	746,500
Miscellaneous enterprises.....	6,992,300	3,533,000	3,764,000	4,864,500	1,840,000
Roads, paving and bridges.....	2,444,000	6,386,500	4,787,000	3,467,500	2,238,800
School buildings.....	1,005,000	3,015,000	1,381,500	2,215,550	1,975,550
Sewers drainage and waterworks.....	485,000	364,800	1,452,000	712,000	217,000
Store buildings.....	.....	1,245,650	361,500	228,500	935,400
Totals	\$15,131,000	\$23,342,600	\$18,941,280	\$16,183,050	\$12,576,900
Contracts Awarded.					
Apartment houses and hotels.....	\$1,362,500	\$665,500	\$1,332,500	\$1,411,230	\$1,242,500
Association and fraternal.....	241,000	345,000	365,000	300,000	250,000
Bank and office buildings.....	100,000	650,000	320,000	855,000	1,140,000
Church buildings.....	424,750	10,540	276,000	73,000	183,500
City and county projects.....	.....	.....	870,000	103,000	397,200
Dwellings.....	460,000	568,550	394,500	476,000	310,650
Miscellaneous enterprises.....	1,125,500	1,254,500	781,650	1,690,500	1,791,000
Roads, paving and bridges.....	2,044,057	5,715,600	3,634,000	2,874,380	1,991,000
School buildings.....	983,500	963,500	1,182,150	2,005,500	1,264,400
Sewers drainage and waterworks.....	644,000	1,139,893	473,500	569,097	556,400
Store buildings.....	113,000	654,000	401,100	320,500	140,000
Totals	\$7,498,307	\$11,967,083	\$10,030,400	\$10,678,187	\$9,266,650

National Association of Manufacturers
829 Stahlman Building, Nashville, Tenn.

J. E. Edgerton, President

July 4, 1922.

Mr. Richard H. Edmonds, Editor,
Manufacturers Record,
Baltimore, Maryland.

My dear Mr. Edmonds :-

I want to thank you for favoring me with a copy of the second edition of "The Prohibition Question". I received the first copy and read it with the most genuine interest. This copy of the second edition shall receive the same interested attention. Even a glance through it convinces me that it is the most remarkable symposium of constructive thought that I have ever seen. I wish to add my unrestrained congratulations upon this magnificent literary and moral achievement, and to assure you of my keen appreciation of the very valuable contribution which you have thus made to the nation's moral and economic life.

I shall take very great pleasure in urging my manufacturing friends and others with whom I come into contact, to read this publication and give it as wide circulation as possible. In my public addresses I frequently give utterance to the opinion that at the root of every economic problem is a moral problem that must be solved before permanent solution of the economic problem can be found. The chief of all moral problems in America now is the question of prohibition. The character of this nation's future hangs upon the answer which is to be made by our country's solid citizenship. We can not depend with reason upon force alone. The desire to abide by the law must be created in the hearts of our people. That can be done only by giving them the truth about the business as you have done in this extraordinary publication of yours.

I wish you long years of continued usefulness to the South and to the Nation. I shall welcome every opportunity to co-operate with you.

Cordially yours,

J. E. Edgerton

Mr. Edgerton's position as one of the great moral and religious leaders of the country, as well as his official position as President of the National Association of Manufacturers should make every reader of his letter appreciate its significance and study the book "The Prohibition Question" to which he gives such unstinted praise.

Sentiment Increasing Among West Virginia Operators Against Any Closed Shop Agreement With Union Miners.

Charleston, W. Va., July 7—[Special.]—When John L. Lewis, president of the United Mine Workers asked during the initial conference between operators and representatives of the miners, held at Washington, why none of the West Virginia fields were represented, he drew attention to a condition which has been developing ever since the inception of the strike, and that is the crystallization of sentiment among West Virginia operators against continuing a closed shop agreement with the United Mine Workers. Lewis's inquiry, operators believe, discloses the fact that he has not been aware of just what was transpiring in West Virginia and must therefore have been surprised when the real situation dawned upon him.

The absence of representatives from any of the West Virginia coal districts was one of the most significant features of the first meeting. Several districts had representatives on the ground to watch developments but none attended the conference although invited to do so. Failure of any of the West Virginia districts to send delegates was prompted by a desire not to commit themselves to any hard and fast agreement involving the check-off and the closed shop.

The policy pursued by the international organization of the mine workers in ignoring West Virginia districts and in calling a strike in West Virginia, together with the success attendant upon the efforts to operate upon a non-union basis, has led West Virginia operators whose mines were formerly unionized to ignore the union and to act independently. Operators point out that it is possible to produce coal on a large scale without consulting the union and show that production has reached a total of 284,450 tons above the normal average weekly loading, the aggregate loadings now being above 1,784,450 tons a week, which represents the product of 844 mines out of the 1421 in the state.

Increases in output have been made despite union activities and despite the handicap of congestion in the southern part of the state, which has materially reduced the number of empties available. The strike of shopmen had not during the first week of July materially interfered with the movement of coal but the Independence Day holiday did reduce the output.

Cotton Goods Consumption Increasing Throughout World.

Writing on the prospects of the textile industry, Tattersall's Cotton Trade Circular, Manchester, England, contains the following:

"Since a month ago producers of yarn and cloth have well maintained their improved position. Buyers realize there is little probability of lower values in the near future, but trade expansion is to some extent checked by the money stringency. The trade prospects in most of our outlets abroad are fairly encouraging.

"Goods that were bought two or three months ago at lower prices than those ruling to-day are being carried into consumption on a favorable basis. Unemployment in spinning and weaving districts is being reduced as a result of the re-starting of idle machinery. Both spinners and manufacturers are obtaining more favorable prices than for a long time back. A strong feeling prevails with regard to raw cotton. The output in the United States next season will have to be substantial to justify lower rates than those ruling at this moment. The strength of the article lies in the increasing consumption throughout the world.

"With future supplies of raw cotton uncertain, along with increasing consumption, there is a distinct possibility of still higher values. The new Egyptian crop seems to be making fair progress but there is fear of an inadequate supply of water.

American Cotton Association Forecasts 10,781,000 Bale Cotton Crop.

In its annual report, the American Cotton Association states that based upon an increase of 6 per cent in the acreage planted for 1922, with an average condition June 20 of 70 per cent the forecast of the crop for 1922 would approximate 10,781,842 bales. This forecast of production will be increased or reduced according to weather conditions and boll weevil depredations during the future growing season of the crop. If the present widespread infestation of the boll weevil continues and is followed by climatic conditions in July, August and September favorable to weevil damage similar to conditions during that period in 1921, the production would not exceed for 1922 a total of 8,554,088 bales, as the condition of the crop to this date is practically the same as for the same period last year.

ESTIMATED COTTON ACREAGE PLANTED IN 1922.

State.	Area Planted 1921—Gov't.	Indicated Area Planted 1922.
Virginia	34,000	38,400
North Carolina	1,417,000	1,516,190
South Carolina	2,623,000	2,360,700
Georgia	4,346,000	3,998,320
Florida	70,000	84,000
Alabama	2,269,000	2,654,730
Mississippi	2,667,000	2,987,040
Louisiana	1,192,000	1,287,360
Texas	11,193,000	12,088,440
Arkansas	2,418,000	2,635,620
Tennessee	640,000	723,200
Oklahoma	2,536,000	2,840,320
Missouri	104,000	138,320
California	140,000	189,000
Arizona and all others.....	104,000	151,620

Total for United States.... 31,763,000 Acres ' 33,693,260 Acres

The report shows 70 per cent of the counties heavily infested with boll weevils, and 30 per cent light infestation, with only a small area reporting no boll weevils. This presents a condition which it is thought will force a revolution in the usual methods employed by the Government and private statisticians in forecasting production so early in the season.

Advancing Cotton Prices in Lancashire.

Manchester, England, June 20—[Special.]—During the past month cotton prices in Lancashire have displayed a distinct upward movement, and in his Cotton Trade Circular published this week Mr. Frederick W. Tattersall, of Manchester, gives the index number for the general average of current cotton values as 197, an advance of 13 points compared with a month ago, and bringing the figure to the level existing at the end of last year. Twelve months ago the index was 175.

The ruling price of each commodity at the outbreak of the late war represents the basis of 100 in each case. On the month Egyptian cotton has risen 20 points to 232, and Egyptian yarn 15 points to 181. American cotton at 194 registers an advance of 18 points, and a 10 point rise has occurred in American yarn, making the figure 205. In cloth prices the hardening tendency has not been quite so pronounced as the appreciation on the month is only 4 points from 170 to 174.

Large Supply of Watermelons.

Commercial production of 60,102 cars of watermelons in the early producing states is forecast by the Department of Agriculture. This compares with 51,481 cars last year. Acreage this year is 168,100 acres, compared with 117,700 acres in 1921. Georgia, with a prospective commercial crop of 22,207 cars leads, followed by Florida, 12,744 cars; Texas, 8416 cars; and South Carolina, 6044 cars.

Bond Issue of \$1,500,000 for Jahncke Dry Docks.

New Orleans, La., July 8—[Special.]—A bond issue of \$1,500,000 was recently floated here within a short time for the re-financing of the Jahncke Dry Docks, Inc., one of the largest industries of the city. It spends approximately \$3,300,000 yearly in this territory, more than one million of which is the pay roll.

\$12,000,000 From War Finance Corporation to Help Texas Cotton Farmers.

Dallas, Tex., July 1—[Special.]—It is announced by John T. Orr of Dallas, president of the Texas Farm Bureau Cotton Growers' Association, that he has practically concluded arrangements with the War Finance Corporation for securing a loan of \$12,000,000 to finance, in part, the cotton crop of Texas this year. In a report of the activities of the Association last season Mr. Orr said the total sales amounted to \$8,777,779. The average price obtained was 18.21 cents per pound for middling cotton up to May 1, and since then the price has been 20.32 cents per pound, he said. A premium of \$3.50 per bale over the price for cotton not marketed under the jurisdiction of the Association was obtained by the organization which handled 93,472 bales.

"Although given a credit of \$10,000,000 by the War Finance Corporation, we found it necessary to use but \$2,000,000 of that credit," Mr. Orr said. "This fact was accomplished through the \$4,000,000 loan to us by Texas banks. The money was obtained at first at 7 per cent and later at 5 and 6 per cent.

"Advances on cotton to members totaled approximately 90 per cent, less their previous credits, while the amount for handling the crop and other charges will be deducted from the remaining 10 per cent. The results of the year's crop handling shows the value of co-operative marketing."

Over 10,000,000 Barrels of Oil Produced in El Dorado, Ark., Oil and Gas Field.

Results of a study of production conditions made by engineers of the United States Bureau of Mines in the El Dorado, Ark., oil and gas field are given in a bulletin issued by the Bureau of Mines, Manufacturers and Agriculture, Little Rock, Ark. The El Dorado oil field has developed rapidly since January 10, 1921, state the engineers, when the first well that produced commercial quantities of oil was completed. Up to November, 1921, the field had produced approximately 10,000,000 barrels of oil from a proven oil area of about 4825 acres, which was an average of 2150 barrels to the acre.

Since August, 1921, producing wells were completed at the average rate of about twenty per week for three months. By the end of October, 1921, about 400 commercial oil wells had been completed. The initial productions of the oil wells ranged from only a few barrels to 15,000 barrels of oil per day and the gas wells up to a maximum of about 40,000,000 cubic feet of gas per day. Unfortunately, some of the wells have been inefficiently handled, which has resulted in considerable waste.

The El Dorado field furnished the first commercial production of oil in the State of Arkansas. Gas has been produced since about 1905 in the Fort Smith gas field, which lies near the Oklahoma line and some 175 miles northwest of El Dorado. Because of this gas production, the Arkansas Legislature passed an Act in 1917 which dealt with the conservation of oil and gas. The situation for El Dorado was therefore unique, in that the first oil production of the state was immediately subject to the regulations of a conservation commission.

The excessive production of sand with the oil has been the source of much trouble to the operators and has caused them to give considerable attention to the handling of this problem.

The excessive production of water in some areas has curtailed or stopped the production of oil and gas. Several factors have contributed to a more rapid increase in water production than was necessary. One object of this report is to indicate the harmful effect of water and to discuss the most effective methods of excluding the water and operating the properties.

The present report includes a history of the development

of the El Dorado field; discusses drilling methods employed in the field, water conditions, and the use of cement as a protection against water encroachment; and contains a production record of the field. A chapter, contributed by the United States Geological Survey, covers the geology of the field.

Searching for Oil in Florida.

William E. Bolles, of Oldsmar, Fla., and Mr. B. L. Bauer of Tampa, have compiled the following list of companies operating or preparing to operate in Florida in search of oil. They report six wells are now being drilled in Florida, and that about 30 more companies and individuals are getting leases and having geological examinations made preliminary to drilling.

Their list of companies boring, or preparing to bore, or investigating oil possibilities in the state, is as follows:

Oldsmar well No. 1 down 2400 feet being drilled by R. V. Hill, in Hillsborough county.

Miami well, down 500 feet, by Consolidated Oil and Gas Co., in Dade county.

Fort Myers well, down about 500 feet, by Florida Exploration Syndicate, in Lee county.

Palmdale well, by Palmdale Oil Co., in Glades county.

Wakulla well, in Wakulla county.

Bushnell well, by Bushnell Oil Co., in Sumter county.

In addition to the above, the following old companies and oil operators are making preparations to drill.

Home Petroleum and Gas Co., of Tampa, derrick erected at Booker creek in Pinellas county.

J. S. Hansell, of Matagorda county, Texas, in co-operation with W. E. Bolles, of Oldsmar, location in Pinellas county.

United Oil and Gas Co., of Tampa, operating in Hillsborough and north central Polk county.

Magnolia Petroleum Co., of Dallas, Texas.

J. K. Hughes Development Co., of Mexia, Texas.

Humphreys Oil Co., of Mexia, Texas.

Suwanee Oil and Development Co., near Live Oak, Suwanee county.

Lake County Oil Co., in southwestern part of Lake county.

Melbourne East Coast Oil Co., south of Melbourne, in Brevard county, down 1200 feet.

Miami Oil Co., west Miami in Dade county.

Tatum Bros., west of Florida City, Dade county.

Florida Leases Syndicate, southwest of Immokalee, in Lee county.

Brewton Oil and Land Co., east of Fisheating creek, Glades county.

Star State Oil Co., in Glades county.

Atlantic Gulf Oil Co., Glades county.

Palmetto Oil Co. in Manatee county.

Revere Oil Co., in Southeastern Hillsborough county.

Alafia Oil Co., in Hillsborough county.

Florida Oil Drilling and Leasing Co., in Pasco County.

Bruce Oil Syndicate, Riverview, in Hillsborough county.

Professional Men's Oil Co., Pasco and Sarasota counties.

Success, Jr., Oil Co., Polk county.

Haines City Oil Co., northeast of Haines City, Polk county.

Baker Drilling Co., west side of Baker county.

Tampa Bay Oil Lands Co., of St. Petersburg; location in western Hillsborough county.

P. K. Bolles, of Oldsmar, in Hillsborough, Pinella, Pasco, Hernando and Sumpter counties.

Frank C. Mass Syndicate, in north Hillsborough county.

Stephens Syndicate, east side of Sumpter county.

Emery Syndicate, south side of Pasco county.

J. J. McCaslin, Pinellas county.

National Oil and Drilling Co., Sebring, Fla.

Florida-Texas Leasing Syndicate, Tampa.

This list is by no means complete, as it is rumored that other big Texas companies have their representatives at work in various parts of Florida and some of the above list may be the local operating ends of some of these Texas corporations.

To Erect New Church Building.

Oklahoma City, Okla., July 10—[Special.]—Monnot & Reed are the architects for a new building for the Church of Our Lady of Perpetual Help to be erected at a cost of \$150,000. It will be 70 by 160 feet, of fireproof construction, with slate or tile roof.

THE IRON AND STEEL SITUATION

Steady Increase in Production at Pittsburgh.

Pittsburgh, Pa., July 8—[Special]—Production of pig iron in the half-year just ended has been about 9,800,000 gross tons, against 7,157,145 tons in the second half of last year and 9,530,981 tons in the first half. There has been practically a continuous increase in the rate of pig iron production since July of last year, when the rate dipped to the lowest level for many years.

While production in the first half of this year was at an average rate of 19,600,000 tons a year, production at the present time is at a rate of about 30,000,000 tons a year, almost equal to the average rate in 1912 and 1913, the greatest tonnage years before the war.

As to the relation between the coal strike and the iron and steel industry, the annual rate of pig iron production has been approximately as follows: January 1, 19,500,000 tons; April 1, when the coal strike started, 25,000,000 tons; July 1, after three months of the coal strike, 30,000,000 tons, showing an increase of 20 per cent in the rate during three months of the coal strike.

That is not all. It costs money to blow in a blast furnace and this is rarely done except for a run of several months at least. Week by week up to the present time additional furnaces have been blown in. This shows that the owners consider themselves assured for an indefinite period both of a supply of coke for the furnaces and of a supply of coal to operate the attendant steel works, since most of the pig iron made goes into steel making. It may be that the country is running out of coal in certain connections, but it is plain that the steel producers are not running out. As to consumers of steel, there is no evidence that they are running out. If they were, they would be calling upon steel mills to slacken in steel deliveries. This they are not doing. The pressure upon steel mills for deliveries is, thus far at least, as heavy as ever.

The steel market itself is quiet, but this is not unfavorable, as the market invariably is dull in July and August, and this time the mills enter the midsummer period well filled with orders. A year ago they had no orders ahead and ran practically on orders and specifications received from day to day. The result was that in July, 1921, production of steel ingots was at the rate of about 11,000,000 tons a year. Now the rate is about 40,000,000 tons a year, and except for the unfavorable influence of hot and humid weather this rate is certain to be kept up this month and next.

Additional evidence has accumulated of the steel producers as a whole occupying a conservative position in the matter of prices. A month and more ago the disposition among the majority if not nearly all of the independent producers was to push price advances as far as the market would stand at the moment, and with buyers frightened about the coal strike and with a reaction from the timid position buyers occupied last year, prices could have been pushed up considerably. With the mills sold up well for only a couple months or so the market would have to start over again in early autumn and from a high price level it might have had difficulty in getting started. With the advance practically arrested, however, there is left a sound and safe basis for the resumption of business. Plates, shapes and bars are 1.60c to 1.70c, depending on delivery. Sheets are on the basis of 3.15c for common black, the higher prices formerly advertised so extensively being now confined to early deliveries. Nails go more commonly at \$2.40 than at \$2.50. Fabricated or woven wire fence, which has been in poor demand for a long time, has been reduced about \$4 a ton, the discount to consumers being increased from 68 per cent to 70½ per cent off list, jobbers getting an extra trimming beyond this.

Pig iron continues dull, with the market still quotable as for a couple months past at \$25 for Bessemer and basic and \$24 for foundry, f.o.b. valley furnaces. Freight to Pittsburgh came down from \$1.96 to \$1.76 July 1, while 20 years ago it was 75 cents. The scrap market is easier.

\$20 Per Ton the General Price for Pig Iron at Birmingham—Production Speeded Up.

Birmingham, Ala., July 10—[Special.]—Most of the furnace interests of the Birmingham district are asking \$20 per ton, No. 2 foundry, for their product. While \$18.50 per ton is still heard of as the minimum price, sales have been made recently on a \$19 per ton basis as the low mark. Some of the smaller interests are out of the market so far as the third quarter of the year is concerned. The buying in quantity for the fourth quarter has not yet started in. Recently the St. Louis agencies had some good business for the Birmingham producers and shipments are going out steadily. Very little apprehension has been expressed so far, apparently, that the strike of the railroad men will delay movements of the product. In other words, there were no rush orders put in; consumers have not been asking for quick deliveries on purchases made some time back.

The production in the Birmingham district is being speeded up as far as possible. The Tennessee Coal, Iron & Railroad Company has two blast furnaces in operation at Bessemer, one to go on ferro-manganese in the immediate future, the ore now coming in from Brazil, via Mobile and the Warrior river. The Tennessee Company will also blow in its No. 1 furnace at Ensley shortly. The Republic Iron & Steel Company has its third furnace at Thomas almost ready for the torch and before the end of the month will be producing iron there. The Tennessee Company has six furnaces on basic and two on foundry iron right now, sales having been made to quite a little tonnage on foundry in the past few months.

Alabama pig iron is being shipped to all parts of the country. The Sloss-Sheffield Steel & Iron Company has worked down to a considerable extent its pig iron and coke stocks. The accumulation took place during the depression, no effort being made to sell while the prices on iron were low. This company is now getting \$19 as minimum with \$20 as general price, with quick shipments possible. The selling into the fourth quarter of the year is just beginning to make a little impression. No doubt is expressed that long before the third quarter has started good, the tonnage disposed of for fourth quarter delivery will be considerable.

Stove makers in the middle west have been purchasing some iron. All cast iron pipe and soil makers in the local territory have been liberal in their purchases and have prepared for some time to come. Indications are that the melt of cast iron pipe, especially the high pressure product, will continue steadily through the balance of the year, business still coming in with this industry.

Coal production in Alabama has struck the maximum pace, the weekly output being around 330,000 tons. Estimates are to the effect that 8,000,000 tons of coal were produced during the first half of the year and that not less than 10,000,000 tons can be looked for during the remaining six months, bringing about a total of 18,000,000 against 13,015,007 tons in 1921. The coke production is also being speeded up. The coal strike in the central competitive field has had the effect of transferring considerable immediate delivery business to the Alabama fields and those companies in position to take on any of the business are reaping a harvest. Belief is

held that the activity in the coal fields will continue through the balance of the year, the local needs being strong.

Scrap market quotations show very little change for the week, with stocks plentiful and dealers able to move out promptly on any and all orders.

Export steel business is strong, rail, wire, wire products, bar and other shapes leaving here steadily. Cuba is again taking steel wire products. The Gulf States Steel Company has four out of six open hearth furnaces in operation now and the Steel Corporation steel mill, (Tennessee Coal, Iron & Railroad Company), is at 100 per cent capacity.

Pig iron and iron and steel scrap quotations follow:

PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$18.50 to \$20.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$19.00 to \$20.00; iron of 2.75 to 3.25 per cent silicon, \$19.50 to \$21.00; iron of 3.25 to 3.75 per cent silicon, \$20.00 to \$21.50; iron of 3.75 to 4.25 per cent silicon, \$20.50 to \$22.00.

OLD MATERIAL

Old steel axles.....	14.50	to	15.50
Old iron axles.....	14.50	to	15.50
Old steel rails.....	14.00	to	15.50
Heavy melting steel.....	13.50	to	14.50
No. 1 R. R. wrought.....	12.50	to	14.00
No. 1 cast.....	14.50	to	15.50
Stove plate.....	14.50	to	15.50
Old car wheels.....	13.00	to	15.00
Old tramcar wheels.....	14.00	to	15.00
Machine shop turnings.....	6.00	to	6.50
Cast iron borings.....	6.00	to	7.00
Cast iron borings (chem).....	13.40	to	14.00

RAILROADS

\$3,000,000 Coal Pier for Norfolk.

The Virginian Railway Co. is preparing plans to build a new coal pier at its Sewalls Point terminal, Norfolk, Va., at an estimated probable cost of about \$3,000,000.

Charles H. Hix, vice-president of the company there, in a telegram to the MANUFACTURERS RECORD says:

"Our plans for coal pier number two are not complete and will be thirty days or more before we are able to give outline," also that they will be announced when the company is ready to ask for bids on construction.

The new pier will be operated by electric power as is the old pier and it is stated that when it is completed the company's facilities for dumping coal at Sewalls Point will be more than doubled. It is estimated that it will take about two years to finish the pier, which will be larger than the present pier, which has dumped as much as 580,000 tons of coal in a month.

The new pier is to be equipped with mechanical coal trimmers that will add greatly to its capacity and efficiency and it will be devoted almost wholly to the handling of cargo coal; bunker coal and coal for nearby deliveries will be handled by the existing facilities.

Increasing coal business is expected to grow to dimensions exceeding the capacity of the old pier at Sewalls Point before the new pier can possibly be completed. New mining operations are reported from territory in West Virginia contiguous to the Virginian Railway lines and extensions are in order to haul out the fuel to tidewater. Construction of the new pier is expected to begin within six weeks or two months.

Another Oil Field Railroad Plan.

The Abilene Chamber of Commerce, Abilene, Tex., has appointed a railroad committee to put through plans for the construction of a line from Abilene to Cross Plains, Pioneer and Rising Star, Tex., about 40 miles. George S. Anderson is chairman of an executive board on the subject. Besides going through a new oil field around Pioneer the proposed road would give transportation facilities to a rich farming country. O. A. Hale is president of the Chamber of Commerce.

Central of Georgia Railway's Progress, 1921.

Among the improvement and construction work noted in the annual report of the Central of Georgia Railway Co. for 1921 is the following: "Work was begun in the early part of the year on the construction in Jefferson County, Ala., of a line to be known as the Cahaba District, approximately seven miles in length, extending from McCombs, Ala., in a southwesterly direction along the eastern slope of Shades Mountain. This line will serve the Bragg and Class seams, situated in what is commonly known as the Waterworks Basin of the Lower Cahaba Coal Fields. Tipple layouts to serve both these coal seams will be located near the Cahaba River. Work was started on April 7, 1921, and the line has been fully completed for a distance of four miles from McCombs."

Improvements to the roadway included relaying 37 miles of track with 90 pound rails and the renewal of 593,215 cross ties, of which more than 519,000 are creosoted, this being equal to 206 miles of track or nearly 8½ per cent of all ties in the tracks, including sidings. There were also 30 new industrial tracks built and 16 old tracks of this type were removed, a net increase of 14 industrial tracks.

A reinforced concrete roundhouse and shop at Columbus, Ga., was completed during the year and 1000 feet of pile and timber trestles were replaced with earth embankments.

The company purchased seven new mountain type locomotives, and ten mikado type locomotives were leased from the Illinois Central Railroad. There were also seventeen all steel passenger train cars purchased from the Pullman Company, including 4 sleepers, 5 open coaches, 4 partition coaches, and 4 baggage and express cars. There were no purchases of freight cars.

Railway operating revenues for the year amounted to \$22,057,498, a decrease of \$3,024,789 as compared with 1920; railway operating expenses, \$20,020,842; decrease, \$5,712,524; net revenue from railway operations, \$20,036,656; increase \$2,687,735; railway operating income after taxes and uncollectible revenues, \$1,000,192; increase, \$2,677,206; net railway operating income, after rents, \$1,220,655; increase, \$2,773,846.

Railroad Income Increasing.

The Pennsylvania Railroad reports for May net operating income of \$6,393,329; increase as compared with April, \$1,402,826, and as compared with May of last year, \$2,696,590. The total operating revenues for the month were \$40,634,489. Total operating revenues from January 1 to May 31 were \$199,900,816, or \$5,415,892 less than for the same period of last year, but operating expenses were reduced more than \$28,000,000 so that the net was \$32,875,002 an increase of more than \$24,600,000.

Atlantic Coast, Line during May had gross revenues of \$6,386,000 and net operating income of \$1,573,000, whereas in the same month of last year there was a deficit of \$11,000. Net operating income for the five months of this year totaled \$7,889,000 or considerably more than twice as much as in the same period last year, when it was \$3,195,000.

Freight Movement Growing, Including Coal.

Loadings of revenue freight reported by the Association of Railway Executives for the week ended June 24 totaled 877,856 cars, an increase of 17,084 cars as compared with the preceding week, and 102,000 cars more than were loaded during the same week of last year. There were 96,960 cars loaded with coal, an increase of 4824 cars over the week before. Loadings of coke totaled 9466 cars, an increase of 164. On June 23 there were 429,074 freight cars idle, a decrease of 13,178 cars. Of the total, 255,685 were cars in good repair; the remainder were in bad order.

Sabotage on an Arkansas Railroad.

Bridge burnings that are evidently sabotage done by strike sympathizers are reported from Harrison, Ark. It is stated that three bridges on the Missouri & North Arkansas Railroad—which recently resumed operations after idleness since July 31, 1921, were burned within five days. One bridge was near Fairview, Mo.; another near North Lexa, Ark., and the third one near Freeman, Ark. Citizens, indignant because of the resumption of sabotage almost simultaneously with the resumption of railroad operations, have raised a large fund to be used in payment of rewards for information leading to the arrest and conviction of the guilty persons. Two arrests are noted.

The Missouri & North Arkansas Railroad was compelled to cease operating last summer because of continued heavy losses resulting in large part from sabotage practiced by strike sympathizers following a reduction in wages announced in February, 1921.

May Electrify Steam Line for Interurban Cars.

The Texas Interurban Company, which is building an electric railway from Dallas to Terrell, Tex., has been negotiating with the Missouri, Kansas & Texas Railway to obtain trackage rights between Dallas and Denton, Tex., but a contract has not been concluded. The idea of the interurban company is to equip the road between those points so that electric cars can be run over it as well as steam trains. This would avoid building an interurban electric railway between Dallas and Denton which the company has proposed to do. There is some talk at Dallas to the effect that if a contract is made it will be provided that the interurban service can be extended from Denton to Wichita Falls, Tex., if desired. The distance from Dallas to Denton is 37½ miles; Wichita Falls is 140 miles farther.

Railroad Receiverships to Terminate.

The United States Court at St. Louis has issued a decree to terminate the receivership of the Missouri, Kansas & Texas Railway System and authorizing the sale of the property for not less than \$28,000,000. The receivership has existed for nearly seven years. Byron F. Babbitt, of St. Louis, and Joseph F. Dobbins, of Oklahoma City, have been appointed to conduct the sale, which will take place by auction at Colbert, Okla., in about five weeks, it is expected. Financial interests headed by J. & W. Seligman & Co., and Hallgarten & Co., bankers, New York, have prepared a reorganization plan and they are expected to purchase the system and revise its financial obligations.

The sale of the International & Great Northern Railroad will take place at Houston, Tex., at noon July 28, Lock Daniel being special master in charge.

George B. Tripp, receiver of the South Carolina Light, Power & Railway Co., announces that the sale of the property will take place at the court house in Spartanburg, S. C., on July 31.

The sale of the Alabama & Mississippi Railroad will take place July 31 at Pascagoula, Miss. R. V. Taylor, of Mobile, Ala., is receiver.

Equipment Orders.

Southern Railway is reported in the market for 15 Pacific type locomotives; it has already ordered 15 mikado type engines from the American Locomotive Co.

Santa Fe System is in the market for 8 combination buffet and library cars.

Norfolk & Western Railway will purchase 1000 hopper cars of 70 tons capacity.

Illinois Central Railroad has ordered repairs on 3000 freight cars.

Contract for Important Extension.

The contract to build the Wichita Falls & Oklahoma Railway, 13 miles long from Byars, Tex., to Waurika, Okla., has been let to Frank Kell of Wichita Falls, Tex., who is president and general manager of the Wichita Falls & Southern Railroad. Construction of this extension will open up a direct line from Wichita Falls to Oklahoma City. It is said that the Burlington System is back of the plan and that it will build the bridge necessary to cross the Red River. It is expected to complete the railroad work this summer.

Seaboard Air Line Operating Change.

G. V. Peyton has been appointed general superintendent of the northern district of the Seaboard Air Line Railway System, and P. G. Walton, has been appointed general superintendent of the southern district. Mr. Peyton, formerly superintendent of the Virginia division, will have headquarters at Norfolk, Va., and Mr. Walton, formerly general superintendent of the system, will have headquarters at Savannah, Ga. C. D. Thornton has been appointed superintendent of the Virginia district to take the place formerly occupied by Mr. Peyton. Announcement of these changes was made by M. H. Cahill, vice president and general manager.

Traffic Boom Ahead.

Under the heading "P.R.R. Gets Ready for Traffic Boom," the Philadelphia Ledger says: "Directors of the Pennsylvania Railroad Co. have authorized expenditure of more than \$3,000,000 for erection of additional and new shops. The company has also instructed various departments that look after the repairing and other work relating to the upkeep of locomotives to begin getting all motive power into shape."

Paving Begins on \$1,000,000 Street Improvement Program in Florence, S. C.

Florence, S. C., July 8—[Special.]—The city manager announced today that actual paving operations on the city's \$1,000,000 street improvement program would begin next week. The contractors have machinery on the ground and material en route and have only been awaiting the completion of necessary preliminary work by the city and the gas and electric light interests. To carry out this work so far a large force has been employed for some months.

It is estimated that in addition to the curbs and sidewalks provided for, at least 30 miles of bitulithic streets will be secured from the funds available. This pavement together with that completed some years ago will give Florence one of the finest systems of hard surface streets in the state.

The continued rapid growth of the city has made many public improvements necessary. A large modern high school building has just been completed, an additional grammar school is contemplated and engineers are designing plans for a new water system adequate to supply a town of several times the present population. When these plans have been adopted a bond election will be called to provide necessary funds.

Extensive Improvements to Tin Plant.

Cumberland, Md., July 10—[Special.]—The Belmont Iron Works of Philadelphia has been awarded the contract for extensive improvements to the local plant of N. & G. Taylor Company, Inc., of Philadelphia, manufacturers of tin andterne plate. According to Harry Nuschenheim, of the Taylor Company, the improvements consist of an extension of 140 feet to the present tin house, and a new foundry building 50x90 feet to be equipped with a crane supplied by the Shepard Electric Crane & Holst Co. of Montour Falls, N. Y.

LUMBER AND BUILDING MATERIALS

Satisfactory Sales of Southern Pine.

New Orleans, La., July 8 1922—[Special.]—Sale of Southern pine lumber is being maintained at a satisfactory level. According to the reports of the Southern Pine Association, orders for the week of June 30 totaled 3695 cars containing 78,056,875 feet, as compared with orders for the preceding week amounting to 3215 cars containing 67,916,875 feet. The average orders per mill for June 23 and 30 were 539,023 feet and 614,621 feet respectively. Shipments during the week of June 23 were 3798 cars of 80,232,750 feet, and during the succeeding week this increased to 4105 cars containing 86,718,125 feet. Production for the week of June 30 was 77,055,191 feet, and for the preceding week 70,154,666 feet.

Shipments for the week of June 30 were 12.54 per cent above production. Orders were 1.3 per cent above production, and 9.99 per cent below shipments. A decrease in orders on hand of 2.7 per cent was reported during the week. During the preceding week, shipments were 14.37 per cent above production. Orders were 3.19 per cent below production, and 15.35 per cent below shipments. The decrease in orders on hand was 3.7 per cent.

The summary reports for the last two weeks of June are as follows:

FOR WEEK ENDED FRIDAY, JUNE 23.			
	Cars.	Feet.	
Orders on hand beginning of week.....	15,765	333,035,625	
Orders received during week.....	3,215	67,916,875	
Total	18,980	400,952,500	
Shipments during week.....	3,798	80,232,750	
Orders on hand end of week.....	15,182	320,719,750	

FOR WEEK ENDED FRIDAY, JUNE 30.			
	Cars.	Feet.	
Orders on hand beginning of week.....	15,183	320,740,875	
Orders received during week.....	3,695	78,056,875	
Total	18,878	398,797,750	
Shipments during week.....	4,105	86,718,125	
Orders on hand end of week.....	14,773	312,079,625	

Common Brick Prices Fairly Well Stabilized.

Despite greatly increased demand, which in some sections is passing the capacity of the plants, higher prices of coal in some areas and scarcity of that commodity in others, rising costs of manufacture in the eastern states and scattering towards the middle west, the brick industry is holding prices down to a fair profit according to the monthly digest of conditions in the common brick industry just issued by the Common Brick Manufacturers Association of America. At the yards reporting on January 1 the composite price was \$13.47, in May \$12.74, on June 1 \$12.68 and last month \$12.83. The report adds that these figures are not, however, weighted averages, and are low because of sharp competitors' prices in some parts of the South where manufacturing costs are also low.

The summary report for the month says further:

"The coal situation is becoming a real problem, and it is to be hoped that the efforts of the Administration to bring it to an end will be speedily successful. There can, unfortunately, be but little doubt that the situation will be aggravated after July 1 by the retail coal dealers coming into the market under the reduced freight schedules. Plants in New England, through Pennsylvania, Ohio, and as far west as Kansas and Missouri are affected most. Only one plant is reported definitely closed for lack of coal, however. The coal situation, together with the threatened railroad strike, are unfavorable factors in an otherwise encouraging situation.

"The brick industry is producing a more nearly normal amount of brick than for two years past, and the shipments from the yards were greater during the month than the brick produced; 93 firms shipping a little over 95 million, with the kilns turning out \$9 million. That there is little reserve stock to draw upon is indicated by the fact that orders on books total 258 million, stock on hand being only 154 million.

"There is a gratifying improvement in District No. 3, comprising Virginia, the Carolinas, Georgia and Florida. Last month the orders on books were less than the stock on hand, this month the orders exceed stocks by over a million. The brick plants in the giant centre of the brick industry—Chicago—are humming with activity. Brick are being shipped hot from kilns to meet the heavy demand. Hudson River plants are working at maximum capacity. The great brick producing states of Pennsylvania and New Jersey, which with Maryland, Delaware and the District of Columbia form District No. 2, have orders for 32 million brick with stocks on hand of a little short of 14 million for the nine firms reporting. Fifteen million brick were shipped from the plants of these firms last month and 8½ million produced. In Los Angeles the brick men are working to produce the difference between almost 12 million brick ordered and only a little over two million ready to ship. Six firms report that skilled help is scarce, but in the great majority of cases the labor supply is ample and the men are working efficiently."

\$200,000 Sewer Pipe Company Organized—Output to Reach 30,000 Tons Annually.

According to T. C. Carrington, secretary of the Frostburg Commercial Club, Inc., Frostburg, Md., a new company has been organized in that city to be known as the Frostburg Sewer Pipe Company for the manufacture of 30,000 tons of sewer pipe annually. The company is capitalized at \$200,000 and all the stock has been sold, about two-thirds being purchased by Frostburg business men. D. A. Benson of the Big Savage Fire Brick Co. will be president of the new concern, which will have a two-press plant.

The new industry was secured through the efforts of the Commercial Club, assisted by experts from the United States Bureau of Mines and the Maryland State Geological Department, who aided in investigating the various clays and in making tests to determine their commercial usage.

North Carolina Far Ahead of Its Road Building Schedule for 1922—Sixteen New Projects Let to Contract for Total of \$2,203,000.

Raleigh, N. C., June 30—[Special.]—Rounding out the first half of the year with its program of "1000 miles in 1922" the State Highway Commission yesterday put not quite three-quarters of the new construction under contract when bids were opened for 136 miles of gravel and hard surfaced roads. To date the total mileage is 395 of gravel and 345 miles of hard surfaced roads.

Sixteen projects offered to contractors yesterday for 53 miles of hard surfaced roads and 81 miles of gravel roads brought low bids aggregating \$2,203,000. The total cost of the 740 miles let to contract since January 1 is \$12,304,810. This record is believed without parallel in American road construction.

Including in the work let this week was the largest single project yet contracted for, namely, the road between Lumberton and Maxton in Robeson county, 19.08 miles in length, the total cost of which will be \$588,625, including the Federal aid fund.

Bidding was especially keen for the big projects, and the bids submitted were very satisfactory, approximately 150 being received for the 16 projects. Lettings scheduled for July 25 will bring the mileage above 1000.

\$230,000 Road Contract Awarded.

J. U. Addenbrook's Sons, Norfolk, Va., have been awarded the contract for construction of 7.99 miles of one course concrete road to cost approximately \$230,455. G. T. Lewman, South Third St., Richmond, Va., is the engineer in charge, the work being under the direction of the Virginia State Highway Commission.

TEXTILE

Southern Textile Mills in for Long Period of Great Prosperity, is Belief.

Greenville, S. C., July 10—[Special].—All signs point to unprecedented activity in the textile and allied industries of the South within the next three years, in the view of a number of the leading figures of the industry in the east and north as well as in the South.

"I believe that the number of spindles in the Greenville section of South Carolina will be doubled within the next three years" stated a Greenville broker recently. "It is known," he continued, "that large financial interests in New England are trying to buy several South Carolina Mills." Failing in this they will build. Local representatives have been quietly locating sites; the possibilities for labor have been thoroughly canvassed; cotton mill machinery manufacturers are preparing for the move, and already preliminary steps toward entering the southern textile fields are well under way in several notable instances. This broker pointed out the big increase in the number of Southern spindles during the last ten years compared with the increase in New England spindles. With labor conditions in New England bad and getting worse, the movement towards the South is being hastened for here conditions are generally good, raw materials are available and transportation facilities have been very much improved in the past few years. Moreover Southern water projects for electric power are being developed at a rapid rate.

At no time heretofore, even in the prosperous days during the war and immediately thereafter has there been so much interest manifested in the prospective development of the textile industry, and manufacturers and others familiar with the situation are practically of one mind regarding the growth expected and the influences which will be responsible for this development.

Southern manufacturers who have been consistently successful in handling their enterprises no longer have any trouble securing such capital as may be needed for expansions and additions to new mills. Thus these manufacturers do not look for all the future development to be undertaken by new firms, for they themselves will go forward with improvements on a big scale. Textile authorities believe that the trend in the next few years will be towards diversification, which was strongly emphasized recently by President L. B. Tyson of the American Cotton Manufacturers Association, when he declared that the textile industry in the South could never attain full prosperity until the mills acting either collectively or independently should diversify, finish and sell their products. And this means more bleacheries, more printing and mercerizing plants and more knit goods and hosiery mills. Already this movement is under way, judging by the big increase in recent weeks in new textile corporations chartered, announcements of plans for additions and improvements and the actual awarding of contracts for new buildings and equipment, costing in the aggregate millions of dollars.

Not only will the Southern manufacturers put their goods through all processes of manufacture so that they may deliver a finished product, but the question of merchandising will be closely studied. The economic weakness of producing goods and sending the product hundreds and even thousands of miles to be advanced in manufacture and to be completed and then returned with all increased costs due to double transportation charges, increased overhead, added selling expense, etc. is well recognized by the Southern manufacturer and already a decided turn for the better is noted. There is reason to believe also that the development of big textile

mill plants will not be confined to the Carolinas but will extend to every state where cotton is produced in quantity. The trend in this direction is especially noteworthy in the state of Texas, where it is thought a big development may be looked for.

\$1,500,000 in Textile Machinery Ordered.

Belmont, N. C., July 8—[Special].—Within a few days recently orders were placed here for textile mill machinery estimated to cost more than \$1,500,000. This is to be installed locally and is regarded as an indication of the decided upward trend in conditions at Southern Cotton mills.

At the meeting of the board of directors of the Linford Perfection and Acme mills it was decided to purchase equipment for the additions at these mills and install it at once. Half of the necessary machinery was therefore ordered immediately, and the remainder will be secured later on. The Acme mill has been running for over a year and the machinery is intended for the addition recently completed.

The number of spindles ordered for the various mills is:—Acme, 5000; Linford, 8000; and Perfection, 8000. It is hoped to have the machinery in operation by January.

Equipment was ordered also for the China Grove mills, the major item being 8000 spindles.

The officers of these mills include.—A. C. Lineberger, R. B. Suggs, D. P. Stowe, and J. E. Ford.

Engineers Selected for Textile Development Which Will Involve Ultimately 180,000 Spindles.

Chattanooga, Tenn., July 10—[Special].—Robert & Co., Inc., architects and engineers of Atlanta, Ga., have been selected as engineers for the Dixie Spinning Mills here. Topographical maps have been prepared on 850 acres of land already acquired by the company and the engineers are now making a study involving the general layout for the ultimate development covering 180,000 spindles, divided into units of from 15,000 to 20,000 spindles on yarns for mercerizing purposes. The initial development is for 15,000 spindles. Machinery schedules are now being prepared.

Carter Lupton, of this city is president of the Dixie Mercerizing Co. and J. T. Lupton is chairman of the Board of Directors.

Textile Mill Notes.

The Gaston Construction Co., of Gastonia, N. C., with R. S. Ferguson, president, is the contractor for improvements under way at the plant of the Priscilla Spinning Co., Gastonia. A total of 25,000 spindles is to be installed. The officers of the company are:—J. H. Mayes, president; C. D. Gray, vice president; W. G. Hamner, secretary.

The Texas Farm Bureau Cotton Association of Dallas has decided to create a permanent warehouse system with a concentration point at a Texas port. This is in line with the plans for large export business, but this season the work of the Association will be confined largely to domestic trade.

With 16,950 bales of cotton aboard, the Italian freight steamer Ansaldo-V cleared last week from Wilmington, N. C., for Genoa, Italy. This is one of the largest cargoes ever exported from the port of Wilmington. Alexander Sprunt & Sons, Inc. were shippers of the cargo. The vessel drew 26 feet of water.

The Household Hosiery Mills of Chattanooga, Tenn., recently filed application for charter with a capital of \$15,000. The intention is to manufacture and sell direct to the consumer, and plans are under consideration for a large plant in this city. The company will specialize in silk. The incorporators include:—J. C. Miller, C. E. Clift, L. T. Wilkerson, John B. Hyde and W. E. Wilkerson.

Daily Output of 300 Dozen Pairs of Hose.

Spartanburg, S. C., July 10—[Special.]—The Star Hosiery Mill of A. B. Victorious & Co. of New York, is now turning out 300 dozen pairs of hose per day. The mill has 50 knitting machines working on half hose and 80 machines on ladies hosiery. Some of these are dyed in Spartanburg and others sent to the Pulaski, Virginia, plant for finishing.

M. L. Victorious, who recently visited the plant here, said that if additional labor is furnished the output of the local mill will be considerably increased. Several dye experts accompanied him and inspected the facilities of the Star Mill with special reference to bleaching, etc.

It was predicted by some of the visitors that within the next few years a large number of cotton mills will be built in this section by northern capital and it was stated that definite information was available regarding new mills to be built in the near future in Alabama, South Carolina and North Carolina.

China Grove Mills to Employ 300 People.

China Grove, N. C., July 1—[Special.]—Approximately 250 to 300 operatives will be given employment upon the completion of the fine combed yarn mill of the China Grove Cotton Mills Co., Inc., recently organized with a capital stock of \$1,000,000. S. E. Brown, Kannapolis, N. C., has the contract for a brick structure 125 by 454 feet, and 16,000 spindles will be installed. The Whitin Machine Co., Whitinsville, Mass. will furnish the equipment. R. C. Biberstein, Charlotte, N. C., is the architect-engineer in charge.

The officers of the company include: A. C. Lineberger, Belmont, N. C., president; R. L. Stowe, Belmont, vice-president; Jno. H. Rutledge, China Grove, secretary-treasurer.

\$400,000 Finishing Company Formed.

Greenville, S. C., July 10—[Special.]—The Union Bleaching and Finishing Co. of this city has been incorporated with a capital stock of \$400,000. John W. Arrington is president; E. A. Smyth, vice-president; J. W. Arrington, Jr., treasurer, Lester B. Poole, secretary.

The company has a finishing and bleaching plant on the Buncombe Road, having been organized in 1902 with a capital of \$240,000. Its present plant is about four times the size of the original factory.

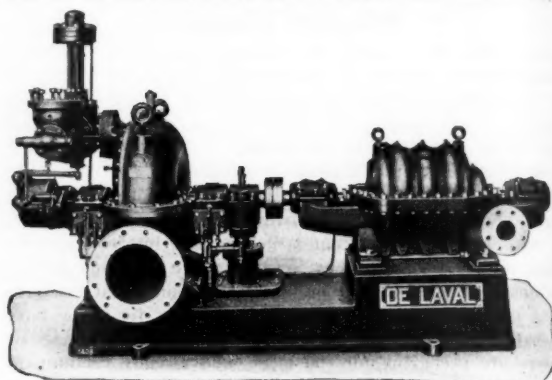
MECHANICAL

Turbine for Severe Steam Conditions.

The velocity stage turbine here illustrated has been carefully designed to meet conditions common to the use of turbine engines employed for driving power plant auxiliaries and it needs but little attention. It is able to use steam at high pressure and superheat, developing the maximum amount of work from the steam, even if it is finally used in feed water heating or for industrial purposes. It is built in sizes up to 1200 horse power and it can be directly connected to high head centrifugal pumps, blowers and compressors, to alternators, and also to small direct current generators. By employing speed reduction gears it can also be connected to medium sized alternators and direct current generators, to large centrifugal pumps and blowers, to belt pulleys and rope sheaves, to paper machines, to rolling mills, and to other slow and moderate speed machinery.

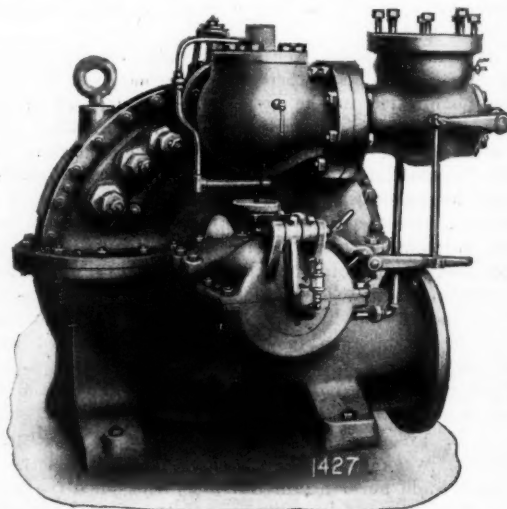
To adapt the turbine for using steam at high pressure and superheat the steam chest and nozzles are located in the casing cover, so that the bearings are not subjected to high temperatures, and as the steam is completely expanded in the nozzles, the turbine case contains steam at exhaust pres-

sure only. From the steel steam chest the steam expands through the removable nozzles, which are accurately reamed for the ratio of expansion desired. The wheel carries two rows of buckets, depending upon the speed and steam condi-



TURBINE ATTACHED TO BOILER FEED PUMP.

tions. The steam discharged from the first row of buckets passes through guide vanes which direct it upon the succeeding row. The admission of steam to the steam chest is controlled by a speed governor which acts upon a double seated valve. The turbine is also equipped with a safety or emergency governor, which is always mounted on the turbine shaft and its action is entirely independent of the main



TURBINE SHOWING LOCATION OF STEAM CHEST.

speed governor. Besides, the valve which is tripped is entirely independent of and separate from the valve used for governing purposes. The turbine case is divided horizontally so that the top half of it may be removed to afford access to the rotating elements, and upon removing the cover the rotating parts can be lifted out.

This turbine is being placed on the market by the De Laval Steam Turbine Co., of Trenton, N. J., primarily to meet a demand for reliable and efficient small turbines where high steam pressures and superheats are used, but it is also equally satisfactory under less severe steam conditions.

\$250,000 Bank Building for Fayetteville.

Fayetteville, N. C., July 10—[Special.]—Stiles S. Dixon and Willard G. Rogers, architects, are preparing plans for a bank and office building for the National Bank of Fayetteville to cost approximately \$250,000. It will be 13 stories high, of steel, concrete and limestone.

Construction Department

EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Bridges, Culverts and Viaducts.

Ala., Birmingham—Jefferson County Board of Revenue, let contract to De Soto Construction Co., at \$9000, to build 60-ft. concrete bridge over Village Creek, on Norwood-Ingle-nook road; cement base; three 20-ft. spans; 29,000 lbs. steel; C. J. Rogers, County Highway Engr.

Ala., Hamilton—State Highway Dept., Montgomery, Ala., will build concrete and steel bridge. For full detail see Mch. Wanted—Bridge Construction.

Ark., Waldron—Scott County Bridge Comms., will build steel truss or reinforced concrete arch bridge. For full detail see Mch. Wanted—Bridge Construction.

Fla., Century—Escambia and Santa Rosa Counties let contract to Turner Co., Pensacola, at \$30,124, to build 325-ft. concrete bridge over Escambia River.

Fla., Jacksonville—City Comsn., Frank H. Owen, Chrmn., let contract to O. P. Woodcock, to build concrete bridge over Hogans Creek on East Bay St.

Fla., West Palm Beach—Palm Beach County Comms. For full detail see Mch. Wanted—Bridge Construction.

Ga., Dublin—Laurens County Board of Comms. Roads and Revenues, will build 7 reinforced concrete bridges. For full detail see Mch. Wanted—Bridge Construction.

Ga., Hortense—Brantley County let contract to Austin Bros. Bridge Co., Atlanta, at \$9750, for bridge across Satilla River, between Hortense and Nahunta; W. M. Robertson, County Judge.

Ky., Greenup—For full detail see Road and Street Construction.

Md., Annapolis—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., let contract to Penn Bridge Co., Beaver Falls, Pa., at \$43,000, for double leaf Strauss Trunnion Bascule Bridge; 95-ft. C. to C., main trunnion; J. N. Mackall, Chief Engr., Baltimore.

Mo., Peno, P. O. McCunes Station—State Highway Dept., Jefferson City, Mo., plans building bridge over Peno Creek on State road from Peno northward, Station 221 plus 20; 80-ft. steel truss; concrete floor; 18-ft. road; five 20-ft. reinforced concrete slab spans approaches; 2 reinforced concrete piers; 5 reinforced concrete pile bents; Pike County, Federal Aid Project No. 188; H. D. Griffith, Div. Engr., Hannibal, Mo.

N. C., Grifton—State Highway Comsn., Raleigh, N. C. For full detail see Mch. Wanted—Bridge Construction.

N. C., Kinston—North Carolina State Highway Comsn., Raleigh, plans building bridge over Moccasin River between Lenoir and Pitt Counties.

North Carolina—North Carolina State Highway Comsn., Raleigh, let contract to Rhyme & Kitchen, at \$25,587.50, to build

bridge over Broad Creek; between Craven and Pamlico Counties; Project No. 264.

S. C., Barnwell—State Highway Dept., Columbia, S. C., let contract to Elliott & Sons, Spartanburg, S. C., at \$10,859.80, for bridges over Salkehatchie River on Barnwell-Kline road; 10 22-ft. reinforced concrete beam spans.

Tenn., Bluff City—Sullivan County, John H. Caldwell, County Judge, plans expending \$10,000 to build steel bridge over Holston River, in 8th Dist., between Bluff City bridge and Spurgeon's Ford.

Tex., Del Rio—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans to build bridge over Pecos River on State Highway No. 12; gravel surfaced approaches; Val Verde County, Federal Aid Project No. 219; \$151,355; R. T. Hunnicut, County Judge; G. M. Jowers, County Engr.

Tex., Fort Worth—Tarrant County plans building following bridges:

Across Mary's Creek near Benwood.

Across Willow Branch near Mansfield.

Across Little Fossil Creek, between Fort Worth and Mansfield; State Highway Comsn., granted \$30,000 aid. Address County Comms.

Tex., Richmond—Fort Bend County plans building bridge; voted \$100,000 bonds. Address County Comms.

Va., Clinchport—Scott County Board of Supvrs., let contract to Roehl & Steel, 923 Holston Bank Bldg., Knoxville, Tenn., to design and build Stock Creek Bridge; 150-ft. reinforced concrete span; 16-ft. roadway; 6-ft. sidewalks.

W. Va., Huntington—L. D. Newman, Comms. Streets and Sewers, will build reinforced concrete bridge across Four Pole Creek, at W. 5th St.; bids opened July 10; A. B. Maupin, City Engr.

Canning and Packing Plants.

Fla., Clermont—Citrus Exchange let contract to A. O. Todd to erect packing plant; cost approx. \$8000.

Fla., Moore Haven—Smith Fishers Co., capital \$25,000, organized with G. J. L. Smith, Mgr., acquired equipment of Feustine Fish Co.

Fla., Weirsdale—Weirsdale Packing Co., capital \$20,000, inctpd. with H. L. Borland, Prest.; L. W. Duval, V.-P.; E. B. Lytle, Secy.-Treas.

La., Mandeville—S. P. Russ will erect canning factory and ice plant.

Miss., Hazelhurst—J. Manguon & Sons, 1121 N. Peter Ave., New Orleans, La., contemplates construction of canning plant.

Clayworking Plants.

La., Lafayette—Brick—Alcee Guidry of

Guidry Brick Co., will double capacity of plant.

Md., Frostburg—Sewer Pipe—Frostburg Sewer Pipe Co., capital \$200,000, organized with D. A. Benson, Prest.; will establish 2 press plants with annual capacity 30,000 tons sewer pipe.

Va., Roanoke—Bricks—Roanoke Brick Co., capital \$100,000, inctpd. with D. J. Phipps, Prest.; J. C. Haley, Secy.

Coal Mines and Coke Ovens.

Ala., Henryellen—Lens Coal Co., capital \$25,000, inctpd. by A. C. Payne, W. L. Simmons and John R. Boyle.

Ky., Providence—South Side Coal Co., incorporated by Jeff McConnell, J. T. White and S. K. Holland.

Va., Richmond—Alleghany Coal Corp., capital \$100,000, chartered with George T. McLean, Prest.; Walter A. Sheppe, Secy.

W. Va., Huntington—Seven Mile Coal Co., inctpd. by S. V. Hendricks, E. H. Butts and P. L. Williams.

W. Va., Huntington—Guyan Valley Fuel Co., capital \$25,000, inctpd. by P. M. Stone, A. D. and J. D. Callihan.

W. Va., Morgantown—Vester Coal Co., capital \$25,000, inctpd. by R. A. Poland, Hudson Chaney and Matt Faherty.

W. Va., Shinnston—Basil H. Coal Co., capital \$50,000, inctpd. by Basil H. Lucas and Basil Lucas, Jr., both Shinnston; Charles G. Coffman, 274 Clay Ave., Clarksburg, W. Va.

W. Va., Wheeling—Sandy Coal Land Co., inctpd. by V. G. Gundling, Alex. Campbell and Carl G. Bachmann.

Concrete and Cement Plants.

Md., Baltimore—Cement—Maurice Chemical Co., 1545 S. Charles St., inctpd. by F. Howard Kidd, W. Frank Reed and Joseph R. Hudson; mfrs. factory cement, binding and glazing materials.

Md., Baltimore—Concrete Blocks—Colonial Concrete Products Co., 111 Collins Ave., capital \$60,000, inctpd. by Charles L. Talbott, George L. Jones and J. Russell Carroll.

Okla., Oklahoma City—Concrete Floors—Oklahoma Cement Floor Co., inctpd. by C. E. Bowman, E. Hortges and A. J. Sullivan.

Tex., Houston—Concrete Pipe—Gulf Concrete Pipe Co., capital \$20,000, inctpd. by N. A. Eppes, H. G. Fields and others.

Cotton Compresses and Gins.

Tenn., Memphis—Chickasaw Cotton Co., \$100,000 capital, inctpd. by Fritz Faehrman, C. Bryce Warren and others.

Tex., Dallas—Texas Compress & Warehouse Co., capital \$100,000, inctpd. by F. J. Phillips, Lucius Rash, H. F. Underwood.

Tex., Galveston—Galveston Cotton Co., capital \$35,000, inctpd. by B. J. Cunningham, C. C. Grant and R. F. Ormand.

Cottonseed-Oil Mills.

Ala., Montgomery—American Cotton Oil Co. will erect \$11,800 gin house on Decatur St., nr. Pollard.

N. C., Forest City—Forest City Oil Mill Co., B. B. Dodgett, Prest., will erect fireproof

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

building; cost \$12,000; install machinery to cost \$75,000; construction by owner.

Drainage Systems.

La., Lawtell—Lawtell Drainage District Comrs., C. N. Bertrand, Prest.; St. Landry Parish, construct gravity drainage system, excavate and dredge approx. 600,000 cu. yds. earth; bids until July 25; Albert Tate, Engr., Opelousas, La. (See Mch. Wanted—Drainage.)

Mo., Trenton—Grand River Drainage Dist. Comms. of Grundy County, expend \$200,000 on construction of ditches; reclaim about 10,000 acres; bids until July 17 (See Mch. Wanted—Drainage.)

Electric Plants.

Ark., Ashdown—City contemplates installing electric light plant. Address The Mayor.

Ark., Blytheville—Arkansas Railroad Commission, granted authority to Arkansas-Missouri Power Co. to issue \$652,000 bonds for extensive development and extension; will purchase plants and equipment of Missouri-Southeastern Utilities Co., and Caruthersville Kennett Light & Power Co.

Fla., West Palm Beach—For full detail see Land Development.

Ky., Louisville—Board of Public Works will install white way on Broadway, Second and Seventh Sts.

La., New Orleans—Consumers Light & Power Co. let contract to J. A. Petty for reconstructing building at 409 Tchoupitoulas St. for power plant.

Mo., Maryville—Maryville Electric Light & Power Co., contemplates constructing transmission lines to Grant City, Parnell, Sheridan and Worth.

Mo., Doniphan—Sam Danner contemplates erecting light, power and ice plant.

Mo., Jefferson City—Carroll County Electric Co., applied to State Public Service Comsn., for authority to purchase and operate Carroll County Water, Light and Transit Co.'s plant and establish transmission line from Kansas City Power & Light Co. to Carrollton.

Mo., Springfield—E. C. Deal, Mgr., Springfield Gas & Electric Co., contemplates erecting power plant; cost approx. \$800,000.

N. C., Carthage—Sandhill Power Co., John R. McQueen, Prest., contemplates building steam power plant at Carolina Coal Co.'s mines, making electric current as an auxiliary to present water power plant.

N. C., Elizabeth City—For full details see Water Works.

N. C., Kinston—City Council and Chamber of Commerce interested in white way on Queen, Heritage and other streets.

Okla., Vinita—Chamber of Commerce, interested in installing municipal white way.

Tenn., Trenton—City let contract for improvements to light and water plant to Fairbanks, Morse, & Co., 900 S. Wabash Ave., Chicago, Ill., for 150 H. P. oil engine, 100 H. P. engine, pumps, dynamos, 12,000 gal. fuel tank and 2 tanks for fire purpose and complete equipment for power plant.

W. Va., Huntington—Consolidated Light, Heat and Power Co., will construct \$14,000 brick and steel building corner Second Ave. and 18th Sts.

Fertilizer Plants.

Ala., Mobile—Fish Products Corp., organized with \$50,000 capital, by W. B. Jones, Biloxi, Miss. and John E. Rolston, Coden, Ala., will establish plant on Bayou la Batre with daily capacity 10 tons fish fertilizer.

N. C., Newton—S. D. Houk of Newton Oil & Fertilizer Mill will establish fertilizer plant.

Flour, Feed and Meal Mills.

Ark., Ft. Smith—Company organized with W. T. Oglesby, L. H. Bowen, of Independence, Kans., to establish flour and feed plant.

La., Esterwood—Dan. J. Fietel, Prest., United Irrigation and Rice Milling Co., will repair burned plant.

Mo., Osage City—Col. James M. Hays will construct flour mill with daily capacity of 100 bbls.; Syone Engineering Co., St. Louis, Mo., Contr.

Okla., Thomas—Thomas Mill & Grain Co., capital \$40,000, inceptd. by J. N. McKeaig, W. J. Peck, J. F. Scott.

S. C., Rock Hill—Standard Milling Co., capital \$10,000, organized with J. W. Jones, Prest.; G. S. Jones, Secy.

Tenn., Fayetteville—Petersburg Mill Co., capital \$15,000, inceptd. by E. E. Eakin, W. B. Moore, J. E. Luna.

Va., Fulton—P. O. Richmond—Fish Guano Co., Walter C. Hill, Prest., will erect fertilizer mfg. plant near Fulton; 105x200 ft.; 35 ft. high with overhead tracks; steel and iron; fireproof; capacity 25,000 tons of fertilizer annually; cost \$50,000.

Va., Purcellville—Loudoun County Milling Co., capital \$40,000, inceptd. with W. H. Adams, Prest.; Samuel H. Rogers, Hamilton, Secy.

Va., Roanoke—Mother State Mill & Grain Co., capital \$100,000, inceptd. with D. D.

Hull, Jr., Prest.; Thos. B. Wolfe, Bristol, Va., Secy.

W. Va., Princeton—Princeton Milling Co., capital \$50,000, inceptd. by J. H. Bates, F. H. Taylor, W. A. Brown. (Lately noted.)

Foundry and Machine Plants.

Ky., Louisville—Scales—Vogt-Zanone Scales & Mfg. Co., increased capital to \$200,000, changed name from Vogt-Sanone Scale Co.

Md., Cumberland—Foundry, etc.—N. & G. Taylor Co., Mariner & Merchant Bldg., Philadelphia, Pa., let contract to Belmont Iron Works, Philadelphia, to erect 140-ft. extension to tin house, equip foundry building with electric crane and hoist.

Miss., Jackson—Machinery—Lauchly Foundry Machine Co., capital \$50,000, inceptd. by Ben. W. Lauchly, W. A. Scott and H. K. Stringer.

Mo., St. Louis—Ventilators—Supreme Heater & Ventilating Corp., chartered by V. E. Hugoniot, J. B. Yoch and Fred Wildermuth.

Mo. St. Louis—Firearms, etc.—Winchester-Simmons Co., reorganized, probable capital \$22,500,000; merger of Associated Simmons Hardware Co.'s and Winchester Co.

Mo., St. Louis—Castings—Atlas Iron Works, capital \$50,000, inceptd. by W. C. Smith, O. B. Klein and H. W. Geiger.

Okla., Sand Springs—Oil Field Pumps, etc.—Tulsa Stove & Foundry Co., A. C. Splitznagel, Prest., let contract to Tulsa Structural Steel Co., to erect 80x200-ft. addition, all steel construction; giving total floor space of \$75,000 ft.; install latest design equipment, electrically driven; addition used for mfr. of oil field pumps, engines, etc.

Tex., Dallas—Sash Weights—Sash Weight Corp. increased capital to \$40,800.

Tex., Electra—Oil Well Supplies—U. S. Machine Shop, Box 424 (lately noted inceptd., capital \$30,000) organized with J. M. Hemby, Prest.; C. A. Lininger, Secy.—Treas.—Mgr.; has building, install forging shop, pipe threading machine, lathes, drill press, shaper for the mfr. and repairing oil field supplies. (See Mch. Wanted—Threading Machine; Hoists (Chain).)

Gas and Oil Enterprises.

Ky., Ashland—Indian Refining Co., 27th and Greenup Ave., will construct and equip additional buildings.

Miss., Hattiesburg—Hattiesburg Traction Co., will extend gas mains to Mississippi Woman's College.

Mo., Joplin—Wilhoit Refinery Co., will expend \$65,000 in improvements and enlargements to plant.

OPPORTUNITIES FOR NEW BUSINESS

THROUGH THE

DAILY BULLETIN

Manufacturers of Machinery and Equipment, Dealers in Railroad and Contractors' Supplies, as well as Architects, Contractors and Builders, find it very profitable to follow up the advance news furnished through our DAILY BULLETIN EVERY BUSINESS DAY IN THE YEAR. It is an authoritative, prompt source of information concerning every industrial and railroad undertaking of any consequence, and likewise all important building operations and municipal improvements in the whole South. The opportunity of getting in correspondence with firms that are in the market is afforded by a daily perusal of its columns.

MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Okl., Oklahoma City—Apco Refining Co., Colcord Bldg., lately noted inceptd. with \$100,000 capital, will erect plant with daily capacity of 600 to 1200 bbls. oil; cost \$30,000.

Okl., Tulsa—Brown Oil & Gas Co., 233 Mayo Bldg., capital \$500,000, inceptd. by W. E. Brown, J. W. Coast, Jr., F. J. Bradford. Tex., Beaumont—Jack Oil Co., capital \$10,000, inceptd. by J. W. Jack, P. M. Weiss, C. T. Duffy.

Tex., Colorado—Mitchell County Oil Corp., capital \$20,000, chartered by G. C. Reed, C. H. Quinn and others.

Tenn., Dayton—Ray County Oil & Gas Co., capital \$25,000, inceptd. by Floyd Knight, Rawlings Gillespie, P. T. Foust.

Tex., Crockett—Crockett Oil Mill, capital \$100,000, inceptd. by G. Q. King, J. Legory, J. S. Shivers.

Tex., Fort Worth—Virginia Oil Assn., capital \$100,000, inceptd. by W. C. Forbes, A. S. Dingee, J. B. Lanerli.

Tex., Laredo—Nueva Oil Co., capital \$40,000, inceptd. by O. W. Kilam, R. F. Peek.

Tex., Mineral Wells—Oran Oil and Gas Co., capital \$1,000,000, inceptd. by A. A. Haubert, John W. Moyers and J. R. Creighton.

Tex., Wichita Falls—Petroleum Corp., capital \$75,000, inceptd. by F. W. Fischer, S. I. Carter, D. E. Ducos.

W. Va., Charleston—Meigs & Summers Oil & Gas Co., capital \$25,000, inceptd. by J. V. Reishman, Charleston; W. A. Charleston, Hinton; Thos. W. Shields, Frankford.

W. Va., Mannington—Peerless Oil Co., capital \$700,000, inceptd. by Jesse Shimp, E. B. Koen, Mannington; James A. Meredith, Fairmont, W. Va.

Hydro-Electric Plants.

Ark., Baxter County—Dixie Power Co., West Plains, Mo., granted Federal permit to build hydro-electric dam on White river at mouth of Buffalo river; also contemplates building dam on North Fork river, near West Plains.

Fla., Pensacola—A. Reed Bingham, Engr., reported to establish water power plants on Styx, Alabama and Perdido rivers.

S. C., Denmark—J. B. Guess, Jr., R. A. Easterling and others interested in hydro-electric plant on Edisto river; 4 mi. from Denmark; plant will be operated in connection with present steam driven power plant at Denmark; increased capacity to 500 K. W.

S. C., Van Wyck—James B. Duke of Southern Power Co., 511 Fifth Ave., New York, reported to be interested in further development of Catawba River; construct dam between Van Wyck and Great Falls.

W. Va., Franklin—M. S. Hodges, reported interested in construction of power plant on south branch Potomac River; straight concrete dam; 10 ft. high; 160 ft. long; 4,000,000 gal. capacity.

Ice and Cold-Storage Plants.

Ala., Huntsville—Huntsville Ice & Coal Co., increased capital to \$100,000.

Fla., Sulphur Springs, P. O. Tampa—Consumers' Ice Co., Clyde Perry, Gen. Mgr. will erect branch plant at Nebraska Ave. and Broad St.; install mch., daily capacity 30 tons; \$30,000.

Mo., St. Louis—Federal Cold Storage Co., capital \$550,000, inceptd. by P. Des. Ball, L. B. VonWeise and W. R. Cady.

Tex., Georgetown—City Ice & Bottling Works, increased capital to \$25,000.

W. Va., Huntington—Fesenmeier Packing Co., M. L. Fesenmeier, Prest., convert establishment on 14th St., into ice and cold storage plant; expend \$140,000 on improvements; capacity 250 tons ice daily; estimated storage capacity of 35,000 barrels of apples, contemplate fur storage room.

Land Development.

Fla., Jacksonville—Estep Investment Co., inceptd. with Charles Tanner, Prest.; O. E. VanNostrand, Secy.-Treas.

Fla., Miami—Charles J. Holleman purchased 150-acre site; will develop for subdivision.

Fla., Oviedo—Swope-Lexette Garden Co., capital \$75,000, inceptd. by O. P. Swope, Prest.; N. F. Lexette, Secy.-Treas.

Fla., St. Petersburg—Florida Investments, capital \$15,000, inceptd. with Walter P. Fuller, Prest.; G. L. Richardson, Secy.-Treas.

Fla., Wauchula—Wauchula Development & Mfg. Co., capital \$3,500,000, inceptd. with H. B. Rainey, Prest.; J. A. McInnis, Treas.

Fla., West Palm Beach—Kenilworth Development Co., J. B. McGinley, Prest., will develop 120 acres on Parker road for sub-division; initial development 40 acres; install electric lights; expend about \$10,000 for water system; \$35,000 for streets, sidewalks, sewers.

Fla., West Palm Beach—L. E. Heisler and Porte F. Quinn, purchased 2300 acres of land, have 20 acres under cultivation in oranges, pineapples, etc.; will probably organize company with \$150,000 capital and later may develop entire tract; Carroll Duncombe, Stuart, Fla., in charge of work. (Supersedes other items.)

Ga., Savannah—Citizens & Southern Co., inceptd. by Mills B. Lane, G. L. Glover and others.

Mo., Clayton—Westover Nursery Co., capital \$120,000, inceptd. by H. W. Andrew, H. W. Tigges and J. L. English.

Mo., Clayton—Westdale Realty Co., capital \$10,000, inceptd. by L. E. Mutrux, Chris. Knudsen, B. M. Knudsen.

Mo., Kansas City—Locust Realty Co., inceptd. by Harvey Stiver, C. B. Arnold, G. W. Arnold.

Mo., Lebanon—Park Manor Realty Co., capital \$12,000, inceptd. by C. G. Watson, G. F. James, W. I. Diffenderfer.

Mo., St. Louis—Emanjay Realty Co., capital \$50,000, inceptd. by J. J. Wayitz, M. J. Ehrlich, Louis Freund.

Mo., St. Louis—June Investment Co., capital \$20,000, inceptd. by Louis Yeckel, Jr., J. L. Wyland and W. F. Rhein.

Mo., St. Louis—Abern Real Estate Co., capital \$200,000, inceptd. by A. M. Ahern, H. E. Farrell and E. Ames.

Mo., St. Louis—Pennsylvania Park Realty Co., capital \$10,000, inceptd. by R. C. Schapler, H. R. Souther, R. J. Klobr.

N. C., Raleigh—Fruitland Orchard Co., capital \$50,000, inceptd. by E. B. Crow, Dr. E. C. Judd and J. W. Adickes.

S. C., Columbia—Enterprise Development Co., inceptd. with John I. Rice, Prest.; N. W. Rke, Secy.

Tex., Brownsville—Mexia Citrus Fruit Growers' Assn., capital \$40,000, inceptd. by A. A. Berry, M. L. Smith, G. W. Wentz.

Tex., Houston—Harris County Comms. Court have 15 acre site at Clear Lake, will develop for park; Howe and Wise, Engrs.

Va., Big Stone Gap—Keystone Land Corp., organized with George Burnham, Jr., Prest.; Ferdinand H. Graser, Secy., both of Philadelphia.

Va., Charlottesville—Highland Live Stock & Orchard Corp., increased capital from \$50,000 to \$100,000.

W. Va., Huntington—Gideon-Broh Realty Co., capital \$100,000, inceptd. by D. Gideon, M. Broh, Sol Birke.

W. Va., Williamson—Kimberling Land Co., increased capital to \$175,000.

Lumber Manufacturing.

Ark., Pine Bluff—Pine Bluff Lumber Co., increased capital from \$35,000 to \$100,000.

Fla., Cottondale—Gainer & Williams, capital \$10,000; S. A. Gainer, Prest.; H. E. Williams, Secy.-Treas.

Ga., Athens—Athens Saw & Planing Mill Co., Barber St., inceptd., operated in connection with Carter-Moss Lumber Co.

Ga., Savannah—Chatham County Lumber Co., capital \$15,000, inceptd. by J. W. Gregorie, Savannah; E. T. Gregorie and D. H. Coddington, New York City.

Ga., Sparta—Sparta Lumber Co., leased Rivers ginnery and power plant, equip for planing mill, mchy. purchased.

La., Tioga—Lee Lumber Co. will rebuild saw mill, daily capacity 70,000 ft. (Lately noted burned at loss of \$100,000.)

N. C., Gibsonville—O. W. Mann Lumber Co., organized with J. W. Burke, Prest.; O. W. Mann, Mgr. let contract for equipment. (Lately noted inceptd., capital \$25,000.)

Tex., El Paso—Lander Lumber Co. increased capital to \$100,000.

Va., Rich Creek—Acme Lumber Co., inceptd. with G. W. Shumate, Prest., Rich Creek; T. E. Ballard, Secy., Peterstown, W. Va.

W. Va., Fairmont—Allied Lumber Co., capital \$35,000, inceptd. by A. J. Colborn, W. M. Chambers and H. A. Weber.

Metal-Working Plants.

Ky., Louisville—Nails, etc.—Kentucky Steel & Wire Co., A. H. Dillon, Prest., Starks Bldg., reported to erect \$200,000 mill at 32nd and Market Sts., 1 story units of steel, concrete and tile construction, having 35,000 sq. ft. floor space; mfre. wire nails, barbed wire, staples, etc., annual output 2100 carloads. (Previously noted.)

Mo., Kansas City—Cash Registers—Federal Cash Register Co., capital \$125,000, inceptd. by K. W. Leeds, R. A. Park and John Nyberg.

Mo., St. Louis—Welding, etc.—St. Louis Electric Welding Co., inceptd. by O. G. Koenig, F. A. Oberhellman and G. A. Lubeley.

Mo., St. Louis—Screens—Outasite Roller Screen Co., capital \$35,000, inceptd. by J. J. Maloney, C. E. Hamilton and J. C. Conannon.

Mo., St. Louis—Washing Machines—Ottendad Plochman Mfg. Co., capital \$10,000, inceptd. by L. A. Ottendad, E. D. Plochman and O. F. Karbe.

Mo., St. Louis—Dental Supplies—Wright Ferguson Co., capital \$10,000, inceptd. by C. A. Ferguson, C. D. and P. J. Wright.

Tenn., Nashville—Surgical Instruments—Eisele & Co., Logan Eisele, Prest., rent building, install automatic and hand screw machines, punch, presses, and special mchy. for mfre. of surgical instruments; electro plating outfit. (See Mchy. Wanted—Metal Working Plant Equipment; Electro Plating Outfit.)

Tex., San Antonio—Poisoning Machine—Saladiner Poisoning Machine Co., capital \$10,000, inceptd. by J. M. Saladiner, J. O. Chapman and H. H. Rogers.

Mining.

Mo., Farmington—Ores, etc.—Irontale Min-

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ing Co., capital \$75,000, inctpd. by W. J. Elledge, B. H. Marbury, and others.

Tex., Austin—Granite—Southwest Granite Co., capital \$40,000, inctpd. by William Wagner, Arthur Nagel and W. W. Winkler.

Tex., Llano—Minerals—Honey Creek Mineral Co. reported to have under construction \$100,000 plant for the mining of molybdenite ore; also to build refining plant and laboratory, costing \$150,000.

Va., Richmond—Copper—Elliott Creek Copper Corp., capital \$10,000,000, inctpd. by Reinhold Reichard, Prest.; George J. Parkhurst, Secy., both Chicago, Ill.

W. Va., Martinsburg—Stone, etc.—F. A. Jones Stone & Lime Co., capital \$50,000, inctpd. by F. A. Jones, Zanesville, Ohio and John R. Foster, Cleveland, Ohio, has 40 acres land, will develop.

Miscellaneous Construction.

D. C., Washington—Mausoleum—U. S. Mausoleum Co., 310 Bond Bldg., (lately noted inctpd.) capital \$600,000, organized with Frank E. Hunt, Prest., Mgr.; will erect Cedar Hill mausoleum, 79x166 ft., 2 story, concrete, steel and marble-tile roof, cathedral windows, bronze gates and trimmings; \$325,000; construction by owners, subletting only parts; Sidney Lovell, Archt., 30 N. Michigan Ave., Chicago, Ill.; Wm. L. Inskeep, Supt. Construction, 310 Bond Bldg.; install 5000 to 7000 gal. automatic pressure water tank. (See Mch. Wanted—Tank (Water); Windows (Cathedral); Bronze Gates, etc.; Construction Mch. and Supplies.)

Fla., Tampa—Wharf, etc.—For full details see Mch. Wanted—Wharf and Shed Foundations.

La., New Orleans—Tramway—Appalachian Corp., Chas. H. Gross, Secy., reported to expend \$750,000 in improvements, including the construction of tramway to connect warehouse with Robin Street wharf.

Md., Baltimore—Elevators—Western Maryland Ry. Co. will begin construction of additional concrete storage tanks at Port Covington elevator, having capacity of 2,000,000 bu.; bring capacity to more than 5,000,000 bu.; add to handling facilities, etc.; 1,000,000 bu. storage addition, pier improvements, workhouse additions, etc., now nearing completion.

Md., Baltimore—Grain Elevators and Piers—Baltimore & Ohio R. R. Co., Officials, studying plans for elevator and piers to replace structures destroyed by fire; total loss approx. \$4,000,000; Port Development Comsn. has offered aid.

Tex., Dallas—Storage Tanks—Magnolia Petroleum Co. will erect 2 steel storage tanks at Caroline St.

Tex., Orange—Dock—C. H. Page & Bro., Austin, Tex., invite bids on construction of extensions to municipal docks; \$250,000 available.

Va., Norfolk—Pier, etc.—Chesapeake & Ohio Ry., F. I. Cabell, Chief Engr., Roanoke, Va., let contract to J. T. Nuchols Co., Richmond, to rebuild burned pier and warehouse; 52x150 ft., reinforced concrete and steel; fireproof; cost about \$125,000.

Va., Norfolk—Pier—Virginian Ry., H. Fernstrom, Ch. Engr., will construct \$2,000,000 electrically operated coal pier, No. 2, at Sewalls Point; plans probably completed within 30 days.

Miscellaneous Enterprises.

D. C., Washington—Incinerators—District Comms. Room 509 Dist. Bldg., will construct additional incinerators to trash plant, Mt.

Olivet road at Montello Ave.; bids until July 17. (See Mch. Wanted—Incinerator.)

Fla., Jacksonville—Barber Supplies—Gus' Barber Supply Co., capital \$50,000, inctpd. with Julius E. Gustafson, Prest.; Charles S. Shoemaker, Secy.-Treas.

Fla., Miami—Engineering—Clayton Battery & Engineering Co., capital \$50,000, inctpd. with A. J. Clayton, Prest.; C. M. Russel, Secy.

Fla., Miami—Engineering—Tropical Engineering Co., capital \$30,000, inctpd. by S. W. Allen, W. H. Phillips and C. L. Brownell.

Fla., Moore Haven—Printing—Glades County Democrat & Printing Co., (lately noted inctpd.) organized with Wallace Stevens, Mgr.; has building; install equipment for printing and publishing. (See Mch. Wanted—Paper; Printing Equipment, etc.)

Fla., Moore Haven—Hatcheries—Smith Fisheries Co., Inc., capital \$25,000, chartered with O. M. Baker, Prest.-Treas.; D. W. Stevenson, Secy.

Fla., Pensacola—Amusements—Stassinios Amusement Co., capital \$15,000, inctpd. with Louis A. Stassinios, Prest.; Louis P. Stassinios, Secy.

Fla., St. Petersburg—Hotels—Ponce De-Leon Hotel Co., capital \$100,000, inctpd. with Emerson E. Wood, Prest.; D. E. Beach, Secy.

Fla., St. Petersburg—Building—Cherbonneau Constr. Co., capital \$50,000, inctpd. with J. W. Cherbonneau, Prest.; James H. Hackney, Secy.; J. A. B. Madden, Treas.

Fla., West Palm Beach—Contracting—H. C. Daniels, Inc., capital \$50,000, chartered with H. C. Daniels, Prest.; B. G. Zabolocki, Secy.

Ga., Columbus—Engineering—Electric Supply & Engineering Co., capital \$50,000, inctpd. by H. W. Morton, Robert W. Smith and J. M. Flournoy.

Ky., Georgetown—Redrying—Georgetown Tobacco Redrying Co., capital \$35,000, incorporated, by J. M. Haggin, J. L. Carrick and H. A. Moore.

La., Baton Rouge—Publishing—State Times let contract to Stewart-McGehee Construction Co., Little Rock, Ark., to erect 2-story, 59x124 ft. fireproof building; install mch. all purchased; Edw. F. Neild, Archt., Shreveport, La. (Lately noted.)

Md., Baltimore—Lithographing—Tyler Lithographing Corp., 425 W. West St., capital \$25,000 inctpd. by Benjamin M. Tyler, E. Wilson Dorsey and Sebastian J. Brauer.

Md., Oakland—Hotel—Oakland Hotel, Inc., capital \$75,000, inctpd. by Henry Lauer, Benjamin H. Sinclair and Lawrence K. Dixon.

Miss., McComb—Electrical Supplies—Home Light Co., capital \$10,000, inctpd. by X. A. Kramer, A. H. Jones and W. S. Johnson.

Mo., Holden—Theatre, etc.—Holden Auditorium Co., capital \$15,000, inctpd. by T. J. Halsey, M. L. Golladay and W. F. McCutchen.

Mo., Jefferson City—Printing—Farmers Directory Co., inctpd. by C. H. Buchanan, C. E. Liles and B. R. Franklin.

Mo., Kansas City—Building Materials—H. D. Heitz Lumber Co., capital \$40,000, inctpd. by H. D. Heitz, B. F. and G. M. Moore.

Mo., Kansas City—Dehydration—Tinsley Dehydrator Co., capital \$10,000, inctpd. by T. H. Tinsley, Bland Cutright and J. A. Clancy.

Mo., Maplewood—Publishing—Maplewood Publishing Co., capital \$10,000, inctpd. by E. Prettyman, R. C. Schapler.

Mo., Mexico—Publishing—Commonwealth University, Inc., chartered by B. F., Esther O. and H. J. Rhodus.

Mo., Springfield—Engineering—Will F.

Plummer, Inc., capital \$10,000, inctpd. by Washington Adams, W. F. and Edith A. Plummer.

Mo., St. Louis—Undertaking—Fendler Undertaking Co., capital \$20,000, inctpd. by Joseph, Theodore and F. Fendler.

Mo., St. Louis—Moving, etc.—Sloans Moving & Express Co., capital \$25,000, inctpd. by L. J. Sloan, W. D. Stewart and others.

Mo., St. Louis—Engraving—Ad. Service Engraving Co., capital \$20,000, inctpd. by R. C. Kroll, W. A. Biesterfeldt and H. L. Watkins.

Mo., St. Louis—Publishing—Vocate Publishing Co., inctpd. by F. F. Whealen, V. V. Barnes and C. R. Herron.

Mo., St. Louis—Construction—Prettyman Construction Co., inctpd. by H. E. and Edith E. Prettyman, R. C. Schapler.

Mo., St. Louis—Theatres—New Shenandoah Theatre Co., inctpd. by H. R. Hamburg, I. E. Goldstein and Sam Lewis.

Mo., University City—Printing—Psychology Press, inctpd. by B. F. Lewis, J. Helman and Joseph Fishman; publish books, pamphlets, etc.

Okla., Ponca City—Transportation—Wigton Aerial Transportation Co., inctpd. by Glen L. Wigton, Jerry Saunders, and others.

S. C., Camden—Florists—Camden Floral Co., capital \$15,000, inctpd. with Wm. Goodale, Prest.; W. H. Harris, Secy.

S. C., Cheraw—Publishing—Cheraw Publishing Co., inctpd. by Joe Lindsay and John W. Justice.

S. C., Columbia—Storage—South Carolina Warehousing Corp., capital \$300,110, inctpd. with R. J. Blackwell, Prest.; B. A. Cook, Secy.-Treas., both Marion, S. C.

S. C., Greenville—Tea Room—Dill Pickle Tea Room, P. M. Musick, Prest., will erect 12x25-ft. mill construction building; bids open Aug. 15; Mahan & Broadwell, Archt., Memphis, Tenn. (See Mch. Wanted—White Enamel Iron.)

Tenn., Memphis—Amusements—Speedway Gardens, capital \$10,000, inctpd. by P. B. Isaac, H. A. Rosen and W. L. Vesey.

Tenn., Memphis—Construction—Eckhoff Construction Co., inctpd. by C. C. Eckhoff, S. M. Anderson and M. L. Garrett.

Tenn., Nashville—Mineral Water—Aldale Water Co., capital \$10,000, inctpd. by D. C. Buell, C. C. Foster and others.

Tenn., Nashville—Publishing—People's Publishing Co., capital \$10,000, inctpd. by Charles Hendley, William Jackson and W. E. Bowers.

Tex., Austin—Greenhouses—Austin Floral Co., 722 Congress Ave., (previously noted inctpd.) organized with W. P. Connelly, Prest.; E. P. Davies, Jr., Mgr. has one 14x36-ft. and one 6x30-ft. greenhouses; leased three 21x100 ft., one 15x50-ft. and one 6x50-ft. houses; will build own range next year; install greenhouse pits, hot beds, watering and heating plants, tank and towers. (See Mch. Wanted—Greenhouse Ventilating Mch.; Glass; Paints, etc.; Pipe and Fittings.)

Tex., Bushland—Storage—Bushland Wheat Growers' Elevator Co., inctpd., W. J. Hill, George Menke and W. L. Campbell.

Tex., Dallas—Construction—Scruggs Construction Co., capital \$10,000, inctpd. by B. B. Price, S. B. and G. R. Scruggs.

Tex., Houston—Plumbing—Archer Plumbing Co., 2510 Washington Ave. (lately noted inctpd., capital \$10,000) organized with E. J. Archer, Prest.-Mgr.; J. H. Snell, Secy.; has building. (See Mch. Wanted—Plumbing Supplies.)

Tex., Houston—Stenciling, etc.—Houston

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Stamping & Stencil Co., increased capital.

Tex., Lufkin—Hotel—Angelina Hotel Co., capital \$30,000, inctpd. by F. R. Hodges, Eli Nuener and Jack Tullos.

Va., Charlottesville—Laundry—Home Laundry Co., Webb Minor, Prest., increased capital to \$75,000.

Va., Norfolk—Steamship Line—Coastwise Steamship Co., capital \$50,000, inctpd. with Geo. deBree Taylor, Prest., Virginia Beach, Va.; W. W. Bennett, Secy., Norfolk.

Va., Richmond—Construction—Grace Street Building Corp., capital \$300,000, inctpd. with E. Elwood Tragle, Prest.; George B. Sneed, Secy.

W. Va., Hinton—Theater—Alleghany Theater Co., capital \$10,000, inctpd. by P. L. Dysard, M. M. Criser and A. D. Daly.

W. Va., Wheeling—Hardware—Greer & Laine Hardware Co., will erect 5 story 89x137½ ft. building, 1327 Main St., brick, tile and concrete; \$150,000.

Miscellaneous Factories.

Ala., Birmingham—Wind Shields, etc.—Gould Mfg. Co., capital \$10,000, inctpd. by F. E. Gould, J. B. Crawford, E. B. Vaughn.

Ala., Birmingham—Paints—Benson Paint & Varnish Co., capital \$50,000, inctpd. with K. Y. Benson, Prest., has plant at 2317 First Ave., will install mch., to mfr. paints.

Ala., Birmingham—Bakery—McGough Bakeries Corp., 2113 2nd Ave., organized with T. A. McGough, Prest.; M. C. Fox, Mgr.; leased building, install bakery equipment. (Lately noted inctpd. capital \$15,000.)

Ala., Birmingham—Chemical—Chas. Siegal purchased and will improve plant of San Nox Chemical Co., 1326 First Ave., N.

Fla., Jacksonville—Bakery—Dorsey Baking Co., B. C. Dorsey, Prest., Main St., let contract to Basil Kennard, to erect 144x85-ft., 2 story plant addition, brick construction, first floor equipped for cake baking, laboratory, oven room, etc., second floor for flour storage, mixing rooms, etc.; install latest automatic mch., increasing daily output to 8000 loaves bread, 10,000 to 12,000 cakes, approx. 1200 lbs.; William Greisser, Archt., Chicago, Ill.

Fla., Daytona—Insecticide—Company organized with \$85,000 capital, L. E. Treadaway, Prest.; L. E. Hoeye, V.-P.; L. N. Treadaway, Secy.; mfr. Yellow Peril, an insect exterminator.

Fla., Jacksonville—Battery—Electrical Battery System, capital \$15,000, inctpd. with W. E. Perryclear, Jr., Prest.; James T. Hoag, V.-P.; Fred B. Noble, Secy.

Fla., Tampa—Medicines, etc.—Taylor Medicine Co., capital \$300,000, inctpd. with M. M. Taylor, Prest.; A. H. Taylor, V.-P.; G. E. Maory, Secy.

Ga., Atlanta—Office Supplies—Alvin Lovin-good, capital \$10,000, inctpd. by Alvin Lovin-good, Hugh Howell, James H. Ables.

Ga., Savannah—Creamery—Gratz Dent, Chatham County Agt. interested in erection of creamery.

Ky., Barbourville—Drugs—Herbolac Drug & Mfg. Co., capital \$20,000, will establish plant to mfr. herb remedies, etc.

Md., Baltimore—Pharmaceutical—Standard Pharmaceutical Corp., R. E. Knox, Mgr., 304 Equitable Bldg., lately noted inctpd. with \$200,000 capital; will install \$10,000 drug mfg. mch.

Md., Baltimore—Chemicals, etc.—Oil Products Co., 304 N. Holiday St., has 3 story plant will expand business, mfr. lubricating oils, and greases, chemical specialties, polishes, pastes, disinfectants, insecticides, liquid soap, etc.; reorganized with \$35,000 capital,

J. G. Platt, Prest., A. L. Kibler, V.-P.—Chemical Director.

Md., Baltimore—Chemical—United Chemical & Industrial Corp., Calvert Bldg., inctpd. by Joseph Murray, Frank S. Muzzey, F. Stanley Saurman.

Md., Baltimore—Radio Parts—McLaughlin Radio & Electrical Corp., 510 Equitable Bldg., capital \$1,000,000, inctpd. by George R. Allen, Ronald R. Fairfax and Alexander R. Allen.

Md., Baltimore—Seeds, etc.—American Dalmation Trading Co., 450 Light St., capital \$10,000, inctpd. by Oscar G. Bright, Fletcher H. Long and William H. Reinhard.

Mo., Clayton—Chemicals—Acoma Chemical Co., capital \$15,000, inctpd. by Moses Leon, J. F. L. and B. M. Zingre.

Mo., Jackson—Shoes—Chamber of Commerce contemplates erecting building to be occupied by International Shoe Co.

Mo., Kansas City—Clothing—Rothschild's, capital \$600,000, inctpd. by L. P. and A. P. Rothschild.

Mo., Kansas City—Shoes—Collier Shoe Co., capital \$10,000, inctpd. by R. F. Lane, F. J. Collier, R. K. Kietrich.

Mo., Mt. Vernon—Creamery—A. B. Mayhew of Crandon, Wis., will erect creamery and cheese plant.

Mo., St. Joseph—Milk Products—St. Joseph Milk Producers Assn., inctpd. by Ed. Hendricks, Frank Buzard, Jr., and Chas. Klpg.

Mo., St. Joseph—Chemical—Gardaplant Chemical Co., capital \$30,000, inctpd. by Glen Snyder, C. J. Griswold, Henry Lake.

Mo., St. Louis—Soaps, etc.—Southwestern Products Co., capital \$25,000, inctpd. by C. B. Brockett, H. W. Jameson and O. M. Charleville.

Mo., St. Louis—Counters, etc.—Proctor Counter Co., capital \$125,000, inctpd. by E. A. Proctor, I. F. Sleeper, Rob Burkham.

Mo., St. Louis—Clothing—Morris Hoffman Co., capital \$500,000, inctpd. by Morris Hoffman, F. W. Hoffman, J. F. Lee.

Mo., St. Louis—Clothing—Unique Trouser Shop, capital \$20,000, inctpd. by Jacob Steinberg, Jacob White, Albert Frankel.

Mo., St. Louis—Clothing—Danz-Kennedy Co., capital \$5000, inctpd. by George Danz, Sr., R. K. Kennedy, George Danz, Jr.

Mo., St. Louis—Clothing—Vanity Cloak, Suit & Dress Co., capital \$10,000, inctpd. by Annie Kaplin, Charles Kaplin, Morris Lapp.

N. C., Asheville—Cigars—L. L. Clark, of Galesburg, Ill.; contemplates establishing cigar plant.

N. C., Lincolnton—Creamery—Lincoln Creamery & Ice Cream Co., R. P. Blanton, Mgr., will rebuild burned plant; 2 story; brick.

N. C., Winston-Salem—Cigarettes—Bailey Bros., Inc., will erect cigarette plant.

Tenn., Chattanooga—Soap—Scholze Soap-Fertilizer Co., capital \$150,000, inctpd. by Henry Scholze, J. N. Kline, Robert Stahl; will construct \$100,000 plant.

Tenn., Memphis—Candy—Triplets Co., capital \$30,000, inctpd. by Wm. M. Devitt, Chas. C. Burke, W. W. Fischer.

Okla., Sand Springs—Peanut Butter—Marker-Stewart Co. will establish peanut butter plant; utilize peanuts from 300 acres.

Tenn., Memphis—Chemical—Larry Hinds Co., 240 Poplar St., capital \$10,000, inctpd. by W. R. Larry, M. F. Hinds and others.

Tex., Dallas—Extracts—Texa-Cola Co. of America, capital \$2,000,000, inctpd. with S. E. Colgin, Prest.; John W. Wood, Secy.; will construct plant; 2 story; fireproof construc-

tion; cost approx. \$200,000; contemplate construction 40 plants in Texas.

Tex., El Paso—Bedding—Welch Bedding Co., capital \$50,000, inctpd. by E. B. Welch, Paul Welsh and W. B. Wilson.

Tex., San Antonio—Auto Enamel—Ideal Mfg. Co., E. D. Nolan, Treas., lately noted inctpd. with \$10,000 capital stock, will erect plant, 175x60 ft.; daily output 2000 qt. cans of auto polish. (See Mch. Wanted—Mixing Tank, etc.)

Va., Danville—Tobacco—A. D. Keen Tobacco Co., capital \$100,000, inctpd. with A. D. Keen, Prest.; H. L. Boatwright, Secy.

Va., Farmville—Creamery—Farmville Creamery, Inc., A. F. Howard, Prest., H. O. Jones, Mgr., has building will install several compressor and hardening rooms. (Lately noted.)

Va., Richmond—Tobacco Products Corp., increased capital from \$3,000,000 to \$157,354,000.

Va., Norfolk—Cigars—Coleman Cigar Co., capital \$15,000, inctpd. with Dorothy E. Coleman, Prest.; W. C. Steinhilber, Secy.

Va., Richmond—Tobacco—Southern States Tobacco Co., capital \$3,000,000, inctpd. with James L. Miller, Prest.; O. C. Gregory, V.-P.; C. M. Dozier, Secy.; to take over and operate plants owned and operated by J. P. Taylor Co., W. A. Willingham & Co., C. B. Cheatham Co., C. R. Dodson Co., including plants at Richmond, Danville, South Boston.

W. Va., Huntington—Candy—Huntington Candy Co., capital \$50,000, inctpd. by H. L. Cook, S. A. Draper, W. E. Drummond.

W. Va., Piedmont—Candy—Peerless Candy Co., capital \$5000, inctpd. by DeWitt S. Samuels, J. P. Carroll, Bidle L. Dunlap.

W. Va., Shinnston—Glass—Alley Glass Co., organized with L. E. Alley, Prest.-Mgr.; Paul E. Tetrick, Treas.; rented plant; mfr. all kinds cut glass.

W. Va., Wheeling—Paint—Quality Paint & Supply Co., capital \$25,000, inctpd. by C. F. Caldwell, C. F. Buchmann, J. E. Morgan.

Motor Cars, Garages, Tires, Etc.

Ala., Montgomery—Filling Station—Standard Oil Co., erect 1-story brick gasoline filling station at Clanton and Hull Sts.

Ala., Selma—Filling Station—Texas Co., plans erecting filling station on Lauderdale St.

Ala., Tuscaloosa—Garage, etc.—Tucker Motor Co., will occupy garage building on 6th St., to be erected by J. C. Persons and Dr. R. L. Hughes.

Ark., Fort Smith—Automobiles, etc.—Paul Sheridan, plans erecting 2-story, 50x140-ft. addition, fireproof, reinforced concrete faced with brick; \$35,000.

Fla., Daytona—Tires—Triple Cities Tire Co., increased capital to \$20,000.

Fla., Jacksonville—Garage—Garage Equipment Co., capital \$20,000, inctpd. with L. P. Weathers, Prest.; O. M. Edwards, Secy.

Fla., Miami—Motors—Ryan & Knight, Inc., let contract for erection of 3 story, 90x110-ft. building, steel frame construction; cost from \$80,000 to \$90,000.

Fla., Tampa—Automobile Accessories—Motor Mart of Tampa, capital \$10,000, inctpd. with O. A. Seaver, Prest.; E. M. Seaver, Secy.-Treas.

Ky., Hazard—McCallum Anti Skidding Chain Tire Co., capital \$10,000, inctpd. by J. G. Begley, Hazard; D. B. McCallum, Berea, Ky.; S. B. Weley, Crab Orchard, Ky.

Md., Baltimore—Garage, etc.—Consolidated Auto Sales Co., 23 Central Savings Bank

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Bldg., inepd. by George H. Schwartz, Alvin G. Ames and John R. M. Staum.

Md., Baltimore—Motors—Eastern Motors Co., 1006 N. Eutaw St., capital \$100,000, inepd. by John H. Ehrhart, Geo. D. Resh and Oliver G. Hanna.

Md., Frederick—Automobile Accessories—Eclipse Mfg. Co., 20 N. Market St., capital \$10,000, inepd. by Elmer E. Green, Preston E. Michael and Charles F. Seeger.

Miss., Jackson—Automobile Accessories—High-Power Mfg. Co., capital \$20,000, inepd. by N. S. Lyon, C. H. Easterling and C. L. Evans.

Mo., Cape Girardeau—Motors—Vandivort Motor Car Co., capital \$25,000, inepd. by J. T. Sackmann, Leon Vandivort and L. L. Albert.

Mo., Carthage—Motors—Darrow Motor Co., capital \$25,000, inepd. by J. M. McNulty, S. D. DeLappe and W. H. Duff.

Mo., Chillicothe—Automobile Accessories—Norman Motor Co., capital \$100,000, inepd. by A. E., L. H. and Mattie E. Norman.

Mo., Joplin—Sales and Service Station—Joplin Supply Co., let contract to C. A. Dieter Construction Co., at \$200,000 to erect 5-story, 75x120-ft. reinforced concrete building, composition roofing, cement and hardwood flooring; electric automatic elevators; Smith & Van Pelt, Archts., Frisco Bldg.

Mo., Kansas City—Motors—Lilley Motor Co., capital \$50,000, inepd. by C. B. Gartrell, H. T. and E. T. Lilley.

Mo., Kansas City—Automobile Accessories—Commercial Acceptance Corp., capital \$100,000, inepd. by Clarence Rose, R. L. Murphy and G. C. Mackay.

Mo., Kansas City—Automobile Accessories—Mona Mobile Oil Co., capital \$12,000, inepd. by R. B. Cessna, L. R. Tolliver and H. B. Walker.

Mo., Kansas City—Tires—Cooper Rubber Co., inepd. by M. L. Brugh, D. T. and F. E. Cooper.

Mo., Kansas City—Automobile Accessories—McFall Motors, capital \$10,000, inepd. by F. B. Eastridge, W. G. and A. A. McFall.

Mo., Kansas City—Automobile Accessories—Universal Paint Remover Co., capital \$75,000, inepd. by B. W. Diggle, Alton Gumbler and W. R. Manning.

Mo., Marshall—Automobile Accessories—A. G. Thomas Motor & Service Co., inepd. by A. G. Thomas, C. I. Duncan and J. A. Walker.

Mo., St. Louis—Automobile Accessories—Southwest Auto & Vehicle Co., capital \$10,000, inepd. by G. E. Fink, J. C. Schoeneberg and C. B. Meyer.

Mo., St. Louis—Automobile Accessories—Ramsey Accessories Mfg. Corp., capital \$15,000, inepd. by Daniel and L. Abransky and others.

Mo., St. Louis—Automobiles—Associated Motor Industries, Inc., capital \$80,000,000, formed by consolidation of 14 companies in seven states including the Traffic Motor Truck Corp., St. Louis and Kentucky Wagon Mfg. Co., Louisville, Ky.; organized with Louis Ruthenberg, Prest., Dayton, O.; T. C. Brandel, V.-P., St. Louis; Will. I. Ober, Chrmn. of Board, Dayton.

Mo., St. Louis—Automobile Accessories—Progressive Mfg. Co., capital \$25,000, inepd. by A. E. Glass, E. S. Rauch and G. C. Betzner.

Mo., St. Louis—Garage, etc.—Travers & Skaggs Garage Co., inepd. by J. P. Travers, A. F. Skaggs and E. G. Hartman.

Mo., St. Louis—Automobiles—Southwest Nash Co., capital \$125,000, inepd. by F. C. McDonald, C. B. Magill and H. J. Smith.

Mo., St. Louis—Garage—Hoffman Dick Motor Co., capital \$10,000, inepd. by Marvin Hoffman, L. J. and A. J. Dicks.

Mo., St. Louis—Automobile Accessories—South Side Buick Auto Co., capital \$25,000, inepd. by F. W. A. Vesper, J. F. Hildebrand and G. S. Schroeder.

Okla., Okmulgee—Motors—Earle Wright Motor Co., (lately noted inepd., capital \$50,000,) organized with W. C. Newman, Prest.; Dwight Richardson, Secy.-Treas.; C. B. Snodgrass, Mgr., let contract to Patti-Moore Construction Co. to erect building, Leon B. Senter, Archt. (See Mch. Wanted—Automobile Trailer Parts.)

S. C., Columbia—Service Station—Standard Oil Co., will erect \$10,000 service station on Green St., wood, metal and brick construction.

Tenn., Memphis—Motors—Union Motor Car Co., increased capital to \$75,000.

Tex., San Antonio—Garage—Mrs. Pauline Cassiana will erect fireproof garage on N. Flores St., invite bids; Henry T. Phelps, Archt.

Tex., Waco—Motors—Alecus-Daniel Motor Co., capital \$12,000, inepd. by Ford Alecus, W. B. Daniel and H. Brelsford.

Va., Richmond—Garage—G. G. Moss Co., capital \$50,000, inepd. with G. G. Moss, Prest.; Carrie D. Moss, Secy.

W. Va., Charleston—Garage—Geary Realty Co., will erect 2 story, 75x115-ft. garage on Virginia Ave., \$15,000.

W. Va., Charleston—Service Station—H. A. Robson will erect battery service on Donally St.

W. Va., Huntington—Automobile Accessories—Tabor Auto Specialty Co., capital \$50,000, inepd. by W. H. Tabor, W. C. McKeller and Robert Major.

W. Va., Wheeling—Garage—Neal Garage of Wheeling, Inc., will erect \$50,000 garage at Bar Mar place; install oil and gas stations, etc.

Railways.

Miss., Grenada—George C. Brown Lumber Co. has begun construction of a standard gauge railroad from Hazerway, just north of Grenada, toward Calhoun City, 6 mi.

Road and Street Construction.

Ala., Birmingham—Jefferson County Board of Revenue, let contract to De Soto Constr. Co., at \$73,000, for 25,000 sq. yds. paving; 375 cu. yds. cement, on Norwood-Inglebrook road; C. J. Rogers, County Highway Engr.

Ala., Birmingham—City, Ernest R. Hawkins, City Engr., let contract to Phoenix Co., at \$6248.75, to pave 15th Ave., between 24th and 26th Sts.; also to Birmingham Railway, Light & Power Co., at \$6305, to pave Pearson St. and Tuscaloosa Ave.; brick.

Ala., Birmingham—Jefferson County Board of Revenue, let contract to H. N. Bowdry, at \$40,577.50 for ¼-mi. South Bessemer road from Poplar St. and Tuscaloosa Ave. to Elizabeth station; 16,000 sq. yds. paving.

Ala., Florence—City plans paving Royal Ave. from Mobile St. to creek on Huntsville road. Address The Mayor.

Ala., Gadsden—City will pave and improve streets; plans issuing \$80,000 bonds; construct sewers; plans \$90,000 bonds. Address The Mayor.

Ala., Hamilton—State Highway Dept., Montgomery, Ala. For full detail see Mch. Wanted—Road Construction.

Ala., Heflin—State Highway Dept., Montgomery, Ala. For full detail see Mch. Wanted—Road Construction.

Ala., Huntsville—State Highway Comn., Montgomery, Ala., plans constructing 2 primary roads through Madison County; north and south, and east and west; part concrete construction.

Ala., Jasper—Walker County Highway Comn. For full detail see Mch. Wanted—Road Construction.

Ala., Mobile—Mobile Board of Revenue and Road Comms., construct 2 roads. For full detail see Mch. Wanted—Road Construction.

Ala., Mobile—Mobile County Board of Revenue and Road Comn., Thos. B. Allman, Clerk, let contract to Toulmin & Strain at \$21,252, to lay gravel 2 mi. Bayou Labatre and Rolston-Coden roads.

Ala., Tusculumbia—State Highway Comn., Montgomery, Ala., let contracts for Jackson Highway from Florence Bridge to mountains beyond Tusculumbia, connecting Sheffield, Florence and Tusculumbia; from Tusculumbia to top of mountain, gravel surface; to Jere Gwin, Birmingham, at \$74,381.76; from top mountain south of Tusculumbia to Florence bridge on Tennessee River, concrete, with bitulthic surface, to Southern Roads Co., at \$88,788.92.

Ark., Little Rock—Street Improvement Dist. No. 313 E. M. Keith Secy., let contract to Oliver Construction Co., at \$37,700, to pave with sheet asphalt, State, 20th, 21st, 22nd St.; Ford & McCrea, Engrs., Gazette Bldg.

Ark.-Tex., Texarkana—City plans paving State, Olive, Hazel, 16th, Maple Sts., etc. Address The Mayor.

D. C., Washington—Dist. Comms. For full detail see Mch. Wanted—Paving.

Fla., Miami—Dade County Comms., will extend Miami Canal road to County line; Beach road to County line; widen Tamiami Trail from LeJeune road to edge Everglades; Mainland-Key Largo road; voted \$1,000,000 bonds.

Fla., Clearwater—Pinellas County Comms. will construct roads; vote Aug. 15 on \$2,697,000.

Fla., Miami—City. For full detail see Mch. Wanted—Paving.

Fla., St. Augustine—St. Johns County Comms., Obe P. Goode, Clk., will construct following:

4.9 mi. Anastasia Island road, from east end Toll Bridge across Matanzas River to St. Augustine Beach.

2.3 mi. Lewis Speedway, from Horn road to St. Augustine golf links.

Evergreen Cemetery road.

Lewis Point road; \$80,000 available.

Fla., St. Augustine—St. Johns County Comms., Obe P. Goode, Clk., received bids from J. Y. Wilson Constr. Co., for following:

1½ mi. from Hastings to Putnam County line, toward Federal Point road.

5.5 mi. Anastasia Island road, from Toll Bridge to Crescent Bridge.

Fla., Tallahassee—B. H. Bridges, City Clk., will pave streets; plans voting on \$125,000 bonds; construct sewers; plans voting on \$20,000 bonds.

Fla., West Palm Beach—For full detail see Land Development.

Fla., West Palm Beach—Palm Beach County Comms., 2 roads. For full detail see Mch. Wanted—Road Construction.

Fla., West Palm Beach—Palm Beach County Comms., Hector Harris, Chrmn., let contract to R. Tomasello, Stuart, Fla., at \$48,250, for 9 mi. 11 ft. macadam oil treated road from East Coast Canal Bridge at Hole Sound to Dixie Highway.

Fla., West Palm Beach—City plans expending \$100,000 to pave and construct

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

July 13, 1922.

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curbs and sidewalks in Flamingo Park. Address The Mayor.

Ga., Cochran—City. For full detail see Mch. Wanted—Paving.

Kentucky—State Highway Comsn., Frankfort, Ky., will construct 6 roads. For full detail see Mch. Wanted—Road Construction.

Ky., Greenup—Greenup County will construct road and bridge; voted \$200,000 bonds. Address County Commrs.

Ky., Henderson—State Highway Comsn., Frankfort, Ky., let contract to Taylor & Petrie, Lewisport, Ky., at \$14,457, for 2.8 mi. Louisville—Paducah road from Corydon to Union County line; Federal Aid Project No. 51, Section B; grade and construct drainage structures.

Ky., Louisville—City. Board of Public Works plans paving with asphalt, Baxter Ave. from Hamilton to Payne Sts., and 18th St. from Main to Bank Sts.

Ky., Whitesburg—Letcher County Fiscal Court plans constructing Whitesburg-Harlan Highway, from city to Dixie Highway at Pineville.

Louisiana — Louisiana Highway Comsn., Maison Blanche Annex, New Orleans, La., let contracts to Cady, McNary, La., at \$37,950, for following:

6.9 mi. Bossier City—Ninock highway from Forks to Curtils; gravel surfacing;

6.32 mi. Bossier City—Minden highway from Forks to Red Chute; gravel surfacing.

5.03 mi. Breau Bridge—Lafayette highway; St. Martin Parish; to A. M. Wilkes, Bunkie, at \$20,421.45.

3.91 mi. Lake Charles—DeRidder highway; Calcasieu Parish; to A. R. McBurney, Welsh, La., at \$11,042.84.

1.01 mi. Lake Charles—Oberlin highway; Calcasieu Parish; to A. R. McBurney, Welsh, La., at \$3045.

La., Baton Rouge—City. For full detail see Mch. Wanted—Paving.

La., Greensburg—Louisiana Highway Comsn., Baton Rouge, La. For full detail see Mch. Wanted—Road Construction.

La., Monroe—Arnold Bernstein, Mayor, let contract to E. J. Deas Co., Monroe, at \$52,000 to pave 13,000 sq. yds. pavement; sheet asphalt; R. S. Reynolds, Engr.

La., New Iberia—Ed. Lasalle, Mayor, let contract to John W. Flenniken, at \$150,000, for asphalt paving and concrete curbing streets.

La., Springville — Louisiana Highway Comsn. For full detail see Mch. Wanted—Road Construction.

Md., Baltimore—Board of Awards. For full detail see Mch. Wanted—Paving.

Md., Baltimore—R. Keith Compton, Chrmn., Paving Comsn., plans paving, repaving and resurfacing Kathland Ave., from Granada to Old City line; Granada Ave. from Springdale to Forest Park Ave.; Hamilton Ave. from Gwynn Oak to Hampshire Aves.; Springdale Ave., from Hamilton to Hillsdale Aves.; Halcyn Ave., from Hartford to Eloise Aves.; Southern Ave., from Hartford to Eloise Aves.; 33rd St. from Ellerslie to Snowden Aves.

Md., Baltimore—Board of Awards. Wm. F. Broening, Pres., plans widening 3 sections Edmondson Ave., between Allendale road and Old Edmondson Ave.; also plans widening Old Frederick road to 50 ft. between Hilton and old city limits; H. G. Perring, Chief Engr.

Missouri—State Highway Dept., Jefferson City, Mo., let contracts for following: 2,009 State road from Kirksville eastward and westward; Adair County, State Aid

Project No. 20,161; to John T. Timmons, La Plata, Mo., at \$9093.41.

3,358 mi. State road from Cassville to Wheaton; Barry County, State Aid Project No. 20,134; to C. F. Williams, Monett, Mo., at \$12,104.61; grade and construct drainage structures on both.

Missouri—State Highway Dept., Jefferson City, Mo., plans constructing following:

Pike County, .25 mi. State road from Penonorthward; gravel surface; Federal Aid Project No. 188; H. D. Griffith, Div. Engr., Hannibal, Mo.

Montgomery County, 1,879 mi. State road through Wellsville and Jonesburg Spec. Road District; State Aid Project No. 20,173; R. W. Hodson, Div. Engr., Jefferson City, Mo.

Cooper County, 2,102 mi. State road from Boonville Township line southward; State Aid Project No. 20,162; R. W. Hodson, Division Engr., Jefferson City, Mo.; grade and construct drainage structures on all.

Mo., Cape Girardeau—A. P. Behrens, City Clk., will resurface with reinforced concrete pavement, Broadway from Main to Water Sts.; grade and curb; grade, curb and pave Morgan Oak St., from Sprigg to Frederick Sts.; resurface with reinforced concrete pavement, Themis St. from Main to Water Sts.; grade and curb; bids opened July 10.

Mo., Carrollton—Carroll County Court, plans constructing Lakes-to-Gulf highway; votes July 29 on \$125,000 bonds.

Mo., Kennett—City. For full detail see Mch. Wanted—Paving and Sewer Construction.

Mo., Poplar Bluff — Butler County received bids for 8 mi. Little Rock road, from Poplar Bluff to Arkansas line; Project No. 58, Section C; Little & Dean, Paris, Tenn., at \$69,704.24, low bidder.

Mo., Albany—State Highway Dept., Jefferson City, Mo., plans constructing 3,973 mi. State road from King City northward and southward; surface sledged stone base with rock asphalt, penetration bituminous macadam, asphaltic concrete, waterbound macadam intermediate course and inverted penetration macadam, or one course cement concrete pavement; Gentry County, Federal Air Project No. 54; N. R. Sack, Div. Engr., Ballinger Bldg., St. Joseph, Mo.

Mo., Bollivar—State Highway Dept., Jefferson City, Mo., let contract to A. T. Bramer & Son, Monett, Mo., at \$8024.57, for 2,311 mi. State road from St. Clair County line to Humansville; grade and construct drainage structures; Polk County, State Aid Project No. 20,157.

Mo., Carthage—City plans paving several streets, including Howard and S. Maple Sts. Address The Mayor.

Mo., Carthage—Jasper County. For full detail see Mch. Wanted—Road Construction.

Mo., Carthage—State Highway Dept., Jefferson City, Mo. For full detail see Mch. Wanted—Road Construction.

Mo., Gallatin—Davies County Court will improve roads in County; plans voting on \$90,000 bonds.

Mo., Jefferson City—Richard P. Nacy, Clk., let contract to Joseph Pope, at \$14,040.25 for improving Main St.; repair Madison St., between McCarthy and Miller; concrete cement; bids invited soon.

Mo., Marshfield—State Highway Dept., Jefferson City, Mo., let contract to J. E. Hartley, Mt. Vernon, Mo., at \$8560, for 3.864 mi. State road from St. Louis to Springfield; grade and construct drainage structures; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Mo., Slater—Board of Alderman plans paving principal streets; A. F. Miller, of Shockley Engineering Co., Consult. Engr.

Mo., Springfield—Green County Court, let contract to Oliver Construction Co., Little Rock, Ark., at \$43,713.66 for 9 mi. State Highway from Galloway to Rogersville.

Mo., St. Charles—City plans paving Clay St.; may let contract soon. Address The Mayor.

Mo., Trenton—City plans paving Washington St. with tarvia. Address The Mayor.

N. C., Greensboro—State Highway Comsn., Raleigh, N. C. plans constructing following: 3 mi. Kivett road, from High Point into Jamestown; concrete.

2 mi. State Highway between Greensboro and Gibsonville, through Whitsett; water-bound macadam.

N. C., Charlotte — Mecklenburg County Highway Comsn., plans hard-surfacing 7 mi. York Highway, from Long's store at York and Steel Creek roads to end of macadam on York road; \$130,000; invites bids; Lloyd Ross, Engr.

North Carolina — North Carolina State Highway Comsn., Raleigh, N. C., construct 20 roads. For full detail see Mch. Wanted—Road Construction.

North Carolina—North Carolina State Highway Comsn., Raleigh, received bids for following projects:

167—Northampton County, 20.48 mi. gravel road from Boone's Mill to Hertford County line; Jamison Bros., at \$71,218, for roadway; Bacon & Moore, at \$16,596.60, structures.

145—Hertford County, 12.88 mi. gravel road from Winton to Northampton County line; O'Brien Construction Co., at \$41,034.64, roadway; Luck Co., at \$37,565.30, structures.

200—Carteret County, 13.68 mi. grading from Morehead City to Craven County line; Eagle Engineering Co., at \$45,385, roadway; Batson-Cook, at \$27,005, structures.

386-387—Robeson County, 19.08 mi. hard surface road between Lumberton and Maxton, on Wilmington-Charlotte-Asheville road; Jas. C. Hayworth, Chicago, Ill., at \$552,024, roadway, and \$36,601 on bridges.

463—Person County, 11.24 mi. hard surface road from Roxboro to Durham County line; Porter & Bird, at \$297,408.50.

473—Vance County, 7.8 mi. hard surface road from Henderson to Warren County line; R. G. Lassiter & Co., at \$236,071 roadway, and \$5335, structures.

419—Franklin County, 12.82 gravel road between Louisburg and Nash County line; Jamison Bros., at \$442,004.40; roadway Brooks & Galloway, at \$13,523.50, structures.

420—Franklin County, 1.56 mi. hard surface road connecting Raleigh-Franklin road with Nashville-Spring Hope road; Chandler & Ragland, at \$46,349.40; roadway; R. G. Lassiter, at \$3,821.50, structures.

402—Chatham County, 6.92 mi. gravel road, from Siler City to Randolph County line; J. F. Mulligan, at \$25,616.90, roadway; F. P. Holder, at \$4816, structures.

611—Richmond County, 9.76 mi. gravel road between Rockingham and Hoffman, on National Highway, McDonald & Brooks, at \$31,800.02, roadway; W. H. Sanders, at \$5184.90, structures.

665—Richmond County, 5.77 mi. hard surface road from Rockingham to Hamlet; A. J. Wardrup, at \$169,607.30, roadway and \$7312, structures.

711—Ashe County, 5.18 mi. grading road between Orion and Wilkes County line; J. F. Mulligan, at \$43,563, roadway; Concrete Steel Bridge Co., at \$13,914, structures.

713—Ashe County, 3.53 mi. hard surface road from Jefferson to Orion; J. F. Mulligan, at \$131,176, roadway; Concrete Steel Bridge

Co., at \$18,082.50, structures.

800—Avery County, 5.84 mi. hard surface road from Plumtree to Mitchell County line; O'Brien Construction Co., at \$152,391.54, roadway; Oliver Costello Bros., at \$31,987.30, structures.

N. C., Chadbourn—L. C. Hand, Town Ck., let contract to D. S. Lewis, at \$20,000 to construct sidewalks, etc.; Carolina Engineering Co., Engr., 412 Southern Bldg., Wilmington, N. C.

N. C., Greenville—Pitt County Highway Comsn., will construct 2 roads. For full details see Mch. Wanted—Road Construction.

N. C., Lenoir—Caldwell County let contract to Costello Bros., Knoxville, Tenn., at \$75,000 to construct 14 mi. dirt road from Princeton to Marion. Address County Comms.

N. C., Morgantown—O. B. Lackey, Town Mgr., plans constructing 3 mi. concrete street paving; \$100,000.

N. C., New Bern—North Carolina State Highway Comsn., Raleigh, plans reconstructing 12 mi. State road between Bridgeton and brick road to Vanceboro; also other sections soil road leading into New Bern.

N. C., Winston-Salem—Forsyth County Highway Comsn., W. A. Mickle, Secy.-Treas., let contract to Hagedorn Construction Co., Thomasville, N. C., for 1650 ft. Woodland Cemetery road; 20-ft. wide; concrete.

N. C., Winston-Salem—North Carolina State Highway Comsn., Raleigh, N. C., let contract to Harris Construction Co., Newton, N. C., at \$74,515.70, for 10.86 mi. hard-surface road between Reynolds and Yaddin River; Forsyth County, Project No. 742.

Okl., Idabel—State Highway Dept., Oklahoma City, will construct 52 mi. gravel surface road as follows:

Section A—14,586 cu. yds.

Section B—19,006 cu. yds.

Section C—22,768 cu. yds.

Section D—12,712 cu. yds.

Section E—11,729 cu. yds. all McCurtain County, Federal Project No. 40; bids opened July 11; Ernest S. Alderman, State Engr., Oklahoma City.

Okl., Okemah—State Highway Dept., Oklahoma City, approved plans for 29 mi. hard surface roads in Okfuskee County as follows:

Federal Aid Project No. 75 from Okemah to Okmulgee County line.

Federal Aid Project No. 64 from Weleetka to point 1 mi. north Pharoah.

Federal Aid Project No. 76, from Boley west to County line; invite bids soon; Okfuskee County and Federal Aid, each to furnish \$200,000.

S. C., Laurens—For full details see Water Works.

S. C., Orangeburg—City plans paving Amelia St. Address The Mayor.

S. C., Spartanburg—City Comsn. For full detail see Mch. Wanted—Paving.

Tenn., Alamo—City. For full detail see Mch. Wanted—Paving.

Tenn., Jacksboro—Campbell County Highway Comms., will construct 2 roads. For full detail see Mch. Wanted—Road Construction.

Tex., Abilene—City Comsn., will construct 100,000 sq. yds. paving on 4 streets, including curbs, gutters, etc.; bids opened July 7; Dallas Scarborough, Mayor; Henry H. Baetjer, City Engr.

Tex., Alpine—Brewster County plans constructing 78 mi. road on State Highway No. 2; gravel; concrete culverts and bridges;

connect with Terrell County on one side, and Val Verde county on other; plans issuing \$300,000 bonds; D. F. H. Manigault, State Highway Engr., Antin, Tex.

Tex., Alvarado—City plans paving streets; voted \$10,000 bonds. Address The Mayor.

Tex., Austin—Travis County plans constructing 5.6 mi. 18-ft. gravel road on State Highway No. 3A, between Jones Crossing at Onion Creek to Bastrop County line; \$67,112; Geo. S. Matthews, County Judge; Office Leonard, County Engr.

Tex., Beaumont—Jefferson County. For full detail see Mch. Wanted—Road Construction.

Tex., Cameron—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans to construct 8.2 mi. 14-ft. gravel road on State Highway No. 44, Milam County, between Rockdale and Lee County line; \$48,829.60; W. C. Gellis, County Judge; A. F. Mitchell, County Engr.

Tex., Cameron—Milam County. For full detail see Mch. Wanted—Road Construction.

Tex., Clarksville—Red River County, Wm. McMaster, County Auditor, will construct 5.39 mi. State Highway No. 35; 8325 cu. yds. gravel; to be furnished by County; bids opened; R. J. Williams, County Judge; J. B. Riegan, Res. Engr.

Tex., Dallas—Dallas County. For full detail see Mch. Wanted—Road Construction.

Tex., Dallas—Dallas County Comms. Court, let contract for following:

3.3 mi. Westmoreland road from end concrete pavement in West Dallas to Fort Worth; Dallas Pike; macadam base; asphalt top; county furnishing certain materials, to Wear & Thomas, at \$34,951.50.

8 mi. Sachse road, from Gar. and to Collin County line; grade, and surface; to H. R. Raney Co., Wiley, Tex., at \$54,534.12; low bidder for asphalt topping, Hill, Wilson and Watson, at \$14,350; Jack Witt, County Engr.

Tex., Gonzales—Gonzales County Comms. For full detail see Mch. Wanted—Road Construction.

Tex., Groveton—State Highway Dept., Austin, Tex., let contract to Smith Bros., Crockett, Tex., at \$189,932, for 17.4 mi. 16-ft. gravel road on State Highway No. 19; Trinity County, Federal Aid Project No. 225; Fred J. Berry, County Judge, Groveton.

Tex., Highland Park, P. O. Dallas—City let contract to Texas Bitulithic Co., at \$30,000 to pave Preston road from Beverly Drive to Mocking Bird lane. Address The Mayor.

Tex., Houston—O. F. Holcombe, Mayor, received bids on following: Milam St. from Villa to Portland; Travis, from Portland to South End, Villa Addition; Villa Ave., from Main to Louisiana Sts.; Wichita Ave. from Travis St. to South End Villa Addition; low bidder, Scott Schambaugh, at \$38,356.15.

Tex., Houston—Harris County, will construct 2 roads. For full detail see Mch. Wanted—Road Construction.

Tex., Houston—City. For full detail see Mch. Wanted—Paving.

Tex., Houston—Harris County will resurface with asphalt, Galveston road from end of city paving at Harrisburg to County line. Address County Comms.

Tex., Kenedy—State Highway Dept., Austin, Tex., plans expending \$300,000 to construct 14½ mi. hard surface road through District to Bee County line; bids opened July 10; 18-ft. paving; O. N. Powell, Highway Engr.

Tex., Jefferson—Marion County plans highway; improvements; \$500,000 bond issue approved to be supplemented by State and

Federal Aid allotments E. B. Lewis, County Judge; T. B. Warden, County Engr.

Tex., Karnes City—Karnes County. For full detail see Mch. Wanted—Road Construction.

Tex., Muleshoe—Bailey County Commr. Court. For full detail see Mch. Wanted—Road Construction.

Tex., Palo Pinto—U. S. Bureau of Public Roads, Washington, D. C., approved plans to construct 21 mi. asphaltic macadam surfaced road; Palo Pinto County, Federal Aid Project No. 294; E. L. Pitts, County Judge; G. W. Courter, County Engr.

Tex., Pearsall—U. S. Bureau of Public Roads, Washington, D. C., approved plans to construct 35.0 mi. State Highway No. 2, from Medina County line to La Salle County line; gravel surface; bituminous topping; \$600,000; Friso County, Federal Aid Project No. 273; J. C. Pranglin, County Judge; J. D. Metcalfe, County Engr.

Tex., Robert Lee—Coke County plans expending \$50,000 to improve Del Rio Highway No. 4, from Blackwell to County line, via Fort Chadbourne, Bronte, Robert Lee; E. J. Stockton, County Judge.

Tex., San Antonio—Bexar County Commr., Precinct No. 4, will surface Geneva St. from Porter St. to city limits; 1½-in. bituminous topping; bids opened July 8; W. S. Kendall, County Auditor; Augustus McClosky, County Judge.

Tex., San Antonio—Bexar County Commr., Precinct No. 2, will surface with 1½-in. bituminous treatment, Vance-Jackson road, from Foch Highway to Keller road; bids opened; Aug. M. McCloskey, County Judge; R. E. Keller, County Highway Engr.

Tex., Waco—McLennan County Commr., W. T. Lockwood, County Auditor, let contract to Deal Bros., Mart, Tex., at \$77,026.32, for earth work and surfacing of lateral roads in Mart Dist.; to McCoy & Richards, Arlington, Tex., at \$37,885.73, for drainage structures.

Tex., Tyler—State Highway Dept., Austin, Tex., approved plans for 14.7 mi. State Highway No. 37, Smith County, between Tyler and Cherokee County line; gravel surface; section concrete; \$252,000; D. R. Pendleton, County Judge; D. K. Caldwell, County Engr.

Virginia—State Highway Comsn., G. P. Coleman, Commr., Richmond, Va., let contracts for following projects:

165—Route 9, 3.35 mi. one course concrete State road between Grove and Lee Hall; to S. R. Curtis & Sons, Lee Hall, Va., at \$98,490.30.

179—Route 97.99 mi. one course concrete State road between Williamsburg and Toano; to J. U. Addenbrooks' Sons, Norfolk, Va., at \$230,455.28; both James City County.

Va., Covington—Town. For full detail see Mch. Wanted—Paving.

Va., Richmond—City. For full detail see Mch. Wanted—Paving.

Va., Richmond—Henrico County, Fairfield Dist., R. Carter Scott, County Judge, will macadamize or improve Nine-Mile road from city limits to intersection with Williamsburg bonds.

W. Va., Charleston—Lon Barringer, City Mgr., let contract to Board & Haley, at \$4935.11 to pave Poplar road, from Beech Ave. to Southern end of city; brick; pave Springdale Drive; Board & Haley, at \$8157.70, low bidders; pave Chester road; G. T. Fogle, at \$10,710.80, low bidder.

W. Va., Clarksburg—D. H. Hamrick, City Clerk, let contracts to Thomas Keenan for paving following: Terra Cotta St., at \$3351; Park Ave., at \$7376.25; Orchard St., at \$8572; Jarvis St., at \$6099.50; to Wayne Allen

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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for following: Sycamore St., at \$14,495.50; Hickman St., at \$9800.

W. Va., Fairmont—Luke C. Arnett, City Clk., plans paving 4th St., brick on concrete; bids opened July 10; S. B. Miller, City Engr. (Lately noted bids until June 24.)

W. Va., Huntington—City Comsn., Mat. Miser, Commrs. Streets and Sewers, let contracts for following: 29th St. from 3rd to 4th Ave., gravel base; to Duncan & Griffith, at \$4400.25; 25th and Hall Sts. from 8th Ave. to Jarrett St., concrete base; to George Henkle at \$17,280; 13th St., sand and gravel; to Geo. Henkle; 15th St. from Columbia to Boulevard Ave., concrete base; to S. E. Walker, at \$7738.

W. Va., Wayne — Wayne County Court plans completing road in Lincoln Dist., Ohio River-Bluefield highway; vote Aug. 8 on \$15,000 bonds.

W. Va., Wheeling—Thomas F. Thoner, Mayor let contract to P. J. Gilligan, Cass & Otto, and H. L. Seabright, at \$300,000 to pave streets with brick on concrete; Harry Conrad, Engr.

Shipbuilding Plants.

La., New Orleans—Motorboats, etc.—Paul and Fred Ziblich, reported to build small shipyard; specialize in motor boats; schooners and barges.

Sewer Construction.

Ala., Gadsden—For full detail see Road and Street Construction.

Ala., Tuskegee—For full details see Water Works.

Ark., Dermott—City.—For full detail see Mch. Wanted—Sewer Construction.

Ark., Warren—Sewer Improvement Dist. No. 1, Henley S. Turner, Secy., receives bids July 17, (change of date) for sewer system; Frank L. Wilcox, Engr., Chemical Bldg., St. Louis, Mo.

Fla., Miami—For full details see Water Works.

Fla., Tallahassee—For full detail see Road and Street Construction.

Fla., West Palm Beach—For full details see Land Developments.

Ky., Hazard—Town. A. G. Taylor, Clk., will install \$50,000 sewerage system, not including sewage disposal plant.

Mo., Mount Ranier—For full details See Water Works.

Mo., Kennett—For full detail see Mch. Wanted—Paving and Sewer Construction.

Mo., Marshall—City, C. D. Alexander, Clk., will construct sanitary sewer in Sub-District No. 13.

N. C., Chadbourn—For full details see Water Works.

N. C., Elizabeth City—For full details see Water Works.

Okl., Tulsa—City will construct 18 ft. storm sewer. Address The Mayor.

Okl., Wilburton—For full details see Water Works.

S. C., Charleston—City, J. H. Dingle, Engr., opened bids for sewer and drain extension work; lowest bidders are: Ralph E. Oliver, Knoxville, Tenn.; Charleston Engineering & Contracting Co., Charleston; Ryan & Co., Jacksonville; Hanvellton Co., Asheville, N. C. (Lately noted.)

S. C., Kingstree—For full detail see Mch. Wanted—Sewer Construction.

Tenn., Greeneville — City will construct filtration plant, reservoir and additional sewers; votes Aug. 12 on \$125,000 bonds. Address The Mayor.

Tenn., Lebanon—City has plans by A. B. Clenny, Engr. for construction of sewer and water system; bids opened July 10.

Tex., Eagle Pass—For full details see Mch. Wanted—Sewer Construction.

Tex., Electra—City let contract to Van Orden-Winan: Construction Co., Eastland, to reconstruct sewage disposal plant; cost about \$12,120.

Tex., Houston—City has plans for construction of storm sewer on Polk Ave. from York to Eastwood Sts. and on Rice St. from Dallas to Polk Ave.; cost \$35,000; contemplate constructing sanitary sewer on Lenox St. south of Texas Ave. to McKinney Ave. Address The Mayor.

Va., Clarendon—For full detail see Water Works.

Va., Portsmouth—Dept. of Public Service, J. F. Weaver, Jr., City Engr., let general contract to Ocie Dashields, Portsmouth, for sanitary vitrified pipe system; estimated cost \$30,000; A. W. Howard, Engr. in charge.

W. Va., Wheeling—City, Chas. H. Dowler, Mgr., will construct sewer on Market St.

Telephone Systems.

W. Va., Bluefield—Bluefield Telephone Co., Fred M. Halway, Secy., increased capital to \$1,000,000.

W. Va., Laurel Point—West Side Telephone Co., capital \$10,000, inceptd. by Harry H. Rich and S. E. Titus, both Morgantown, W. Va.; W. L. Titus, Dunkard, Pa.

Textile Mills.

Ala., Opelika—Cotton — Opelika Cotton Mills increased capital stock \$150,000.

Ga., Dalton—Cotton—McLin Textile Co., capital \$150,000, inceptd. with C. E. McLin, Rome, Ga., Mgr., will construct weave room with 100 looms; 100x200 ft.; cost about \$100,000.

N. C., China Grove—Yarns—China Grove Cotton Mills, Inc., A. C. Lineberger, Belmont, N. C. Prest., let contract to S. E. Brown, Kannapolis N. C. to erect building; 125x454 ft.; brick construction; install 18,000 spindles; electric power; Whitin Machine Co., Whitenville, Mass., mch. contrs.; R. C. Biberstein, Charlotte, N. C., Archt.-Engr.

N. C., Gastonia—Priscilla Spinning Co., J. H. Mayes, Prest., let contract to Gaston Construction Co., to erect reinforced concrete building; electric power; install 25,000 spindles.

S. C., Greenville — Bleachery — Union Bleachery Co., capital \$400,000, inceptd. with John W. Arrington, Prest.; E. A. Smyth, V.-P.; Lester B. Poole, Secy.

S. C., Greenville—Cotton—Southern Cotton Mills, changed name from Faris Commission Co., L. W. Faris, Prest., increased capital to \$100,000.

S. C., Liberty—Bleachery—J. F. Banister, Prest of Liberty Bank and Dr. J. C. Hunter, reported interested in establishing bleachery and finishing plant.

Tenn. Chattanooga—Dixie Spinning Mills, Carter Lupton, Prest., has engaged Robert and Co., Archts. and Engrs., Atlanta, Ga., as engineers for mill on 850 acre site; initial installation 15,000 spindles, ultimate development 180,000 spindles on yarn for mercerizing purpose; address Roberts & Co.

Water Works.

Ala., Tuskegee—U. S. P. H. S. Hospital let contract at approx. \$325,000 to Noland-Clifford Co., Inc., Newport News, Va., for construction and equipment of boiler plant con-

sisting of 5 boilers, 150,000 gal. steel tank and tower, construction of sewerage disposal plant, water system, central heating plant, etc.; also have sub-contract for building 4 deep wells, each 500 ft.; and bricking up 5 boilers. (See Mch. Wanted—Sewer Pipe; Brick; Sand and Gravel; Cement and Lime; Lumber; Sewer Castings; Boilers; Tank, Tower and Pumping Mch.; Reinforcing Iron; Contractors Equipment, etc.)

Ark., Booneville—Arkansas Tuberculosis Sanatorium, Board of Trustees, rejected bids for water purification plant; will call for new bids; W. Kiersted, Kansas City, Engr.

Fla., Moore Haven—City let contract to Roberts Filter Co., at \$23,130 to construct waterworks system.

Fla., Vero—City. For full detail see Mch. Wanted—Water Works.

Fla., West Palm Beach—L. G. Biggers, Mayor, expend \$75,000 on high pressure fire protection system; build \$5000 pumping house, capacity 5000 gal. per min. with 130 lb. pressure from each of two pumps; install 250 H. P. electric driven pump and 300 H. P. gasoline driven pump; C. H. Ruggles, Engr. Lately noted. (See Mch. Wanted—Pumps (Electric and Gasoline); Engine; Pipe.)

Ky., Hazard—City, A. G. Taylor, Clk., will construct water works system; 1,000,000 gal. filter plant, pumping station, pumps, reservoir, distributing mains, etc.; install settling basin, storage tanks, superstructure for pump station and filters, filter equipment, chlorine apparatus, high and low service motor driven pumps; cost \$75,000; contracts let to Roberts Filter Mfg. Co., Darby, Pa.; G. B. Howard & Co., Nashville American Cast Iron Pipe Co., Birmingham, Ala.; Mine Service Co., Lothair, Ky. and Darling Valve Mfg. Co., Williamsport, Pa.; J. N. Chesters, Engr., Pittsburgh, Pa.

Mo., Mount Ranier—Washington Suburban Sanitary Comsn., Evans Bldg., Washington, D. C., takes over and will operate town water and sewer plant.

Mo., Branson—City will construct water works and sewerage disposal plant; votes July 18 on \$32,000 water bonds, \$6000 sewer bonds. Address The Mayor.

N. C., Asheville—Board of City Commrs. let contract at \$40,595 to E. T. Belote, Asheville for repairing city reservoir on Beau-catcher Mountain.

N. C., Chadbourn—Town let contract at \$22,500 to S. M. Jones, for water and sewer system; Carolina Engineering Co., 412 Southern Bldg., Wilmington, N. C., Engrs.

N. C., Elizabeth City—City will either construct new water, light, power and sewer plant, or purchase established plant. Address The Mayor.

N. C., Morganton—Town, O. B. Lackey, Engr., let contract to Boyd, Higgins & Go-forth, Charlotte, N. C., for constructing new and extending present distributing system; 12-in. C.I.P.-B. & S.-12 in. gravity system; 2,300,000 gals. delivery; concrete dam 12-ft. high, 90-ft. long; cost \$250,000.

N. C., Wilmington—City. For full detail see Mch. Wanted—Water Works.

Okl., Wewoka—Board of Trustees let contract at \$38,524 to Yates & Gallamore, Cushing, Okla., for waterworks improvements consisting of filtration plant, intake and repairing dam.

Okl., Wilburton—V. V. Long & Co., 1300 Colecord Bldg., Oklahoma City, Okla., Engr. in charge, opens bids July 10 for \$92,000 water works and \$101,000 sewer system.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

S. C., Laurens—City will install water works plant and improve streets; votes July 25 on \$65,000 water bonds, and \$40,000 street bonds. Address The Mayor.

Tenn., Greenville—For full details see Sewer Construction.

Tenn., Fayetteville—For full details see Mch. Wanted—Reservoir.

Tenn., Lebanon—For full details see Sewer Construction.

Tenn., Trenton—For full details see Electric Light Plants.

Tex., Austin—City is considering issuing \$300,000 bonds to construct filtration plant. Address The Mayor.

Tex., Colorado—City will install complete water works system with disposal plant; construct reservoir on Lone Wolf Creek, extend water mains, etc.; sewer system will consist of sewage disposal plant, sewer mains, etc.; cost about \$120,090; Myers & Noyers, Dallas, Conslt Engr.

Tex., Highland Park—P. O. Dallas—City let contract to Heath & Skinner, at \$10,056, to lay 6-in. main on Fairfield Ave., from Mocking Bird lane through to Mt. Vernon Addition. Address The Mayor.

Tex., Highland Park—Highland Park City Council let contract at \$10,056 to Hess & Skinner, S. W. Life Bldg., Dallas, for laying 6-in. water main on Fairfield Ave.

Va., Clarendon—Clarendon Citizens' Assn., C. B. Taylor, Prest., contemplate installing water and sewer system.

Woodworking Plants.

Ala., Birmingham—Furniture—Mosely Trader Furniture Co., incptd. by J. A. Trader and M. E. and L. W. Mosely.

Fla., Brooksville—Crates, etc.—Florida Veneer & Crate Co., (lately noted incptd., capital \$25,000) organized with J. K. Coogler, Treas.; has plant, install \$15,000 to \$20,000 mch. to mfr. orange boxes; daily output 1 car of veneer for cigar boxes. (See Mch. Wanted—Box and Crate Mch.)

Fla., St. Petersburg—Furniture—Sel More Lace Cabinet Co., capital \$10,000, incptd. with C. F. Krom, Prest.; Wm. Crawford, Treas.; B. G. Girardeau, Secy.

Fla., West Palm Beach—Furniture—Math-er Thaxton Huddleston Co., capital \$10,000, incptd. with H. C. Mather, Prest.; J. R. Thaxton, Secy.-Treas.

Ky., Owensboro—Wheels—Owensboro Wheel Co. increased capital to \$300,000.

Miss., Wesson—Boxes, etc.—Fred Furr & Will Knapp, will erect box and veneer plant; acquired site.

Mo., Kansas City—Sash and Doors—S. M. B. Hunt Sash & Door Co., capital \$50,000, incptd. by S. M. B. Hunt, Geo. D. Beardsley and others.

Mo., St. Louis—Toys—Auto Bronk, Inc., capital \$50,000, incptd. by J. J. Rohan, W. B. Adams and J. P. Henry.

S. C., St. Matthews—Furniture—Calhoun Furniture Co., capital \$10,000, incptd. with M. L. Paulling, Prest.; S. E. Crider, Secy.-Treas.

Tex., Dallas—Wheels, etc.—Edwards Wheel & Body Co. will erect 1 story brick plant on Washington; \$10,000.

FIRE DAMAGE

Ala., Albertville—Wm. Haynes planing mill; loss not estimated.

Ala., Benton—Ward Lumber Syndicate's saw mill; loss \$100,000.

Ala., Eufula—C. P. Hill's residence on Colby St.

Ala., Montgomery—Atlantic Coast Line R. R.'s round house, mill room, machine shops, and car repair dept.; loss \$200,000.

Ala., Sheffield—Phillip Olim & Co.'s building.

Ala., Warrior—M. M. Allbritton's store and dwelling; Owens Clothing Co.'s store; Sparks Crawford's building; Alabama Telephone & Telegraph Co.'s building.

Ga., Valdosta—Municipal pumping plant; loss \$30,000; address The Mayor.

Ky., Oakland—F. H. Henderson's store; loss \$10,000.

Ky., Pikeville—Sanitary Steam Laundry Co.'s plant; loss \$25,000.

Ky., Richmond—W. L. Harvey's store; E. C. Cornelison's building.

La., Estherwood—United Irrigation & Rice Milling Co.'s plant.

Md., Baltimore—Moses Levin's store, 915 W. Baltimore St.; loss \$25,000.

Md., Baltimore—Baltimore & Ohio Railroad Co.'s 2 elevators, 2 warehouses and piers, power house, drying shed, etc., Locust Point; loss about \$2,000,000. Address C. W. Galloway, Vice-Prest.

Md., Sharpsburg—H. E. Carnahan's garage, loss about \$30,000.

Miss., Ripley—Everett Martin's residence near Ripley.

S. C., North Augusta—Hankinson Brick Co.'s kilns; loss \$6000.

Tex., Beaumont—Magnolia Petroleum Co.'s 55,000 gal. tank; loss \$10,000.

Tex., Cleburne—Gulf, Colorado & Santa Fe Ry.'s freight sheds; F. Merritt, Chief Engr., Galveston.

Tex., Houston—Trans-Atlantic Petroleum Refining Co.'s still No. 2; loss \$10,000.

Tex., Houston—Plant of Truby Broom Mfg. Co., Milby St. and McKinney Ave.; Monarch Peanut Co.'s plant.

Tex., Throckmorton—Condron & Robinson, Mrs. E. T. Parrott, Buchman Bros. and Mrs. L. F. Hanna's buildings; Thompson Picture Theater; C. G. Wheeler Auto Top Repair Shop.

Va., Pulaski—Cheves Lumber Co.'s garage and storage houses.

W. Va., Hoult—Methodist Epis. Church. Address The Pastor.

Damaged by Explosion.

Tex., Dallas—Bush & Gerts Piano Co.'s plant; loss about \$50,000.

BUILDING NEWS

BUILDINGS PROPOSED

Apartment Houses.

Ark., Little Rock—Henry G. Leiser will erect 2-story building, 922 Rock St.; \$10,000.

Fla., Leesburg—Rigdon Bros. will erect \$16,000 building, 12th and High Sts.; 2 stories; frame; 14 apartments; owners build.

Md., Baltimore—Stratford Apartment Co. will erect \$70,000 building, Liberty Heights Ave. near Denison St.; 3 stories; brick; 109x96 ft.; J. R. Forsythe, Archt., 232 St. Paul St.; owner builds.

Mo., Liberty—R. E. Hall will erect \$20,000 building, Franklin and Missouri Sts.; 45x70 ft.; 3 stories; hollow tile and brick; gravel roof; oak and pine floors; vapor heat, \$3000; plans and construction by owner. (Lately noted.)

Mo., Springfield—Mrs. Virginia H. Prophet will remodel 467 St. Louis St., for apartments; \$15,000.

Okla., Tulsa—L. A. Hurst will erect \$14,000 building, 308 W. Easton St.

Okla., Tulsa—Virgil Jones will erect \$11,000 building, 608 N. Boston St.; 2 stories and basement; 4 apartments.

Okla., Tulsa—Ardena Lewis will erect \$16,000 building, 1111 S. Elgin St.; 2 stories; frame; 4 apartments.

Tex., Dallas—Joe Aronoff will erect \$17,000 building, 2933-35-37 Park Row; brick veneer; 4 apartments.

Tex., Dallas—Mrs. C. M. Latimore will erect \$10,000 building, 500-02 N. Winnetka St.; frame; 4 apartments.

Tex., Dallas—C. F. Roderick will erect \$10,000 building, 1420 Bennett St.; brick veneer; 2 apartments.

Tex., Dallas—Efficiency Apartment Corp. of St. Louis, will erect 10-story building, Maple Ave. and Wolf St., Northeast Dallas; 135 apartments; 152x156 ft.; reinforced con-

crete; gray brick walls; terra cotta trim; elevators; refrigeration plant, children's gymnasium, etc., in basement; 150-car garage in rear; cost, including site and furnishings, \$1,500,000; J. E. Kennefick arranging details.

Tex., Dallas—Simon Goodman will erect \$20,000 building, 2912-14 Maple St.; brick veneer; 4 apartments.

Tex., Dallas—Mrs. C. C. Jackson will erect \$12,000 building, 4114 Gaston St.; brick veneer; 4 apartments.

Tex., El Paso—C. P. Battelstein will erect \$50,000 building, Mesa Ave. near Rio Grande St.; brick; 3 stories; 12 apartments; inclerator; Guy L. Fraser, Archt.

Tex., El Paso—C. P. Battelstein will erect 2-story building, block 45, Hart's addition; \$35,000; 63x103 ft.

Tex., Houston—Fannie S. Padgett will erect \$15,000 building and garage, Branard St. near Travis St.; 4 apartments.

Tex., Waco—F. C. Rahlmann and Davidson & Whitman will remodel auditorium for 2 buildings, one to contain 24 apartments; 4 stories; fireproof; elevators; roof garden; other buildings, 150x110 ft., for business purposes; total \$50,000.

Association and Fraternal.

Ark., Fort Smith—Woodmen of World, Chester Holland, Chrmn. Bldg. Comm., Knights of Pythias, Modern Woodmen of American Independent Order Odd Fellows and D.O.K.K., plan fraternal home.

N. C., Fayetteville—Benevolent Protective Order of Elks will erect store and lodge bldg., Hay and Old Sts.; \$35,000; 50x150 ft.; 4 stories; brick and terra cotta; ordinary construction; built-up roof; concrete and hardwood floors; interior tile; metal ceilings; wire glass; Stiles S. Dixon, Archt.

Tenn., Chattanooga—Aerie No. 945, Order of Eagles, will erect clubhouse, E. 6th and Cherry Sts.; \$60,000; fireproof; brick; 4 stories; first two floors for business purposes.

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Tex., Ennis—C. M. Banner and Joe F. Houdek will erect \$12,000 building for insurance office and bottling works to replace structure lately noted burned; 50x70 ft.; brick; gravel roof; concrete floors; F. V. Lauderdale, Archt. Address Mr. Banner.

Va., Norfolk—Salvation Army will erect building on Talbot St.; 3 stories; brick and stone; Wickham C. Taylor, Archt.; S. B. Williamson, low bidder at \$43,340.

W. Va., Rivesville—Knights of Pythias will erect building; Watkins & Co., Archts., 306 Cleveland Ave., Fairmont; bids until July 8 on concrete or tile foundations.

Bank and Office.

Ark., Walnut Ridge—Dr. H. R. McCarroll will erect brick business and office building on Main St., adjoining Osburn Bldg.

La., Baton Rouge—Baton Rouge Electric Co., T. L. Small, Mgr., purchased site at Florida and 5th Sts., and plans 1 or 2-story office building.

Md., Baltimore—Eureka Life Insurance Co., 9 E. Franklin St., will remodel 6-story building, 8-10-12 E. Fayette St.; hardwood floors; safes; interior tile; metal doors; vaults; vault lights; ventilators. (See Mch. Wanted—Elevators).

Md., Baltimore—Mercantile Bank, Jas. P. Healy, Prest., will remodel building at 120-5 W. Baltimore St.; \$50,000; 21.7x80 ft.; Smith & May, Archts.; Consolidated Engineering Co., Contr.; both Calvert Bldg.

Miss., Meridian—Merchants' & Farmers' Bank will erect \$30,000 building.

Mo., St. Louis—St. Louis Medical Society will erect \$150,000 building, Lindell Blvd. west of Moolah Temple.

N. C., Fayetteville—National Bank will erect \$250,000 building on Market Sq.; 13 stories; steel, concrete and limestone, concrete roof; concrete, terrazzo and hardwood floors; hollow fireproof and interior tile; ornamental terra cotta; metal doors; vaults; wire glass; mail chutes; Stiles S. Dixon, Fayetteville, and Wm. G. Rogers, Charlotte, Asso. Architects.

Okla., Tulsa—Exchange National Bank will erect 13-story annex, Third and Boston Sts.; 90x90 ft.; \$1,000,000.

Tex., Houston—Houston Building Co., S. F. Carter, will erect 5-story addition to Carter Bldg.; steel frame; fireproof; composition and promenade tile roof; concrete and probably composition floors; steam heat; 2 gearless type elevators; ornamental terra cotta; interior tile; metal doors; wire glass; mail chutes; Sanguinet, Staats & Gootlieb, Archts., Carter Bldg. (Lately noted).

Churches.

Ala., Mobile—Broad St. Methodist Church will erect church, Government Street Loop; H. E. Palmer interested.

Ala., Mobile—Northside Baptist Church, Rev. P. G. Carter, Pastor, plans church.

Ark., Centerton—M. E. Church, South, Rev. W. J. LeRoy, Pastor, will erect church to replace one wrecked by tornado; brick; 75x55 ft.; seat 400; R. H. Hunt, Archt., Exchange Bldg., Chattanooga, Tenn.

Ark., Fort Smith—First Methodist Church, Dr. Giles Lucas, Chrmn. Bldg. Comm., will remodel building, 5th and Jefferson Sts.; \$17,000, wiring contract to Bert Brooks; plumbing, N. Greathouse.

Ark., Fort Smith—Lexington Ave. Baptist Church, Rev. P. B. Langley, Pastor, will remodel auditorium and erect Sunday school annex; 2 stories and basement; brick.

Ga., Atlanta—Cooper St. Baptist Church, Rev. Wm. H. Beiers, Pastor, will erect Sunday school addition.

Ga., Macon—Cherokee Heights Baptist Church, Rev. Dr. Sledge, Pastor, will erect church.

Md., Baltimore—P. E. Church of Nativity, Rev. Chas. A. Hensel, Pastor, York and Cedar-croft Rds., will erect \$50,000 parish house; Tudor Gothic design; 2½ stories; stone; auditorium, rector's living apartments, bowling alley, etc.; Mottu & White, Archts., 324 N. Charles St.; ultimate plans call for church building and rectory. (Lately noted.)

Md., Baltimore—Epiphany Lutheran Church, Delaware Ave. near Raspe Ave., Rev. F. A. Hightman, Pastor, will erect 1-story church and 2-story Sunday school building; 40x100 ft. and 40x50 ft.; \$50,000; stone walls; wood frame; Clyde N. & Nelson Friz, Archts., Lexington Bldg.

Miss., Ellisville—Baptist Church will erect \$10,000 Sunday school building; 2 stories and basement; also remodel auditorium. Address The Pastor.

Miss., Gulfport—Christian Church will erect building at 15th St. and 21st Ave.; exterior finish of logs. Address The Pastor.

Mo., Bolivar—Baptist Church will erect building. Address The Pastor.

Mo., St. Louis—West Park Baptist Church, 5944 Easton Ave.; Rev. P. G. Van Zandt, Pastor, will erect \$100,000 church; front of building and basement in first unit, \$40,000.

N. C., Elkin—Baptist Church, C. O. Hadley, Chrmn. Bldg. Comm., will erect \$15,000 Sunday school annex; contract let.

Okla., Ada—Presbyterian Church, Rev. E. O. Whitwell, D. D., Pastor, will erect \$50,000 building; lately noted; 62x108 ft.; concrete, stone, brick and frame; metal roof; hardwood floors; gas stoves; rolling partitions; owner builds. (See Mch. Wanted—Art Glass; Stone; Rolling Partitions).

Okla., Oklahoma City—Church of Our Lady of Perpetual Help, Rev. A. F. Monnot, Pastor, 1108 W. 32nd St., will erect \$150,000 church in 1100 block W. 32nd St.; 70x160 ft.; fireproof; brick and stone; slate or tile roof; finished concrete, tile terrazzo or similar floors; interior tile; ornamental terra cotta; wire glass; vault lights; ventilators; steel sash and trim; steam heat; reflector system lights; \$15,000 pipe organ; Monnot & Reed, Archts., Empire Bldg. (Lately noted.)

Tex., El Paso—Austin Park Christian Church, Rev. Arthur W. Jones, Pastor, will erect first unit of \$50,000 church, \$20,000.

Tex., Fort Worth—First Church of Christ, Scientist, will erect building at 4th and Lamar Sts.; contract let. Address The Reader.

Tex., Lampasas—Methodist Church will erect church and Sunday school. Address The Pastor.

Tex., Port Arthur—First Baptist Church will erect \$100,000 building. Address The Pastor.

Tex., Port Arthur—Trinity Methodist Episcopal Church, South, will erect Mission type building; reinforced concrete; stucco; white stone trim; art glass windows; P. G. Silbert & Co., Archts.; ready for bids on concrete frame about July 15.

Tex., San Antonio—M. Adelman will erect \$37,500 synagogue; 55 x 100 ft.; brick and tile; tin roof; hardwood floors; hollow fireproof and interior tile; ventilators; gas-steam heat; Jno. M. Marriott, Archt., Main and Quincy Sts.

W. Va., Falls Mill—Methodist Church will erect brick building. Address The Pastor.

City and County.

Ala., Birmingham—Market—City will erect \$225,000 market house at 3rd Ave. and 23rd St.; 140x200 ft.; 1-story; reinforced concrete; brick walls; tar and gravel or concrete and tile slab roof; tile or terrazzo

floors on concrete; hollow fireproof and interior tile; rolling partitions; wire glass; ventilators; steel sash and trim; steam vacuum heat; conduit system electric wiring; freight elevator; Martin J. Lide, Archt. and Consulting and Constructing Engr. (Lately noted.)

Tex., Elgin—City Hall—City will erect City Hall. Address The Mayor.

Va., Portsmouth—Fire and Police Station, etc.—City will erect fire and police station and community hall at Port Norfolk; 2 stories; brick; plans by M. L. Parker, Building Inspector; bids opened July 11. Address City Manager.

Courthouses.

Miss., Cleveland—Bolívar County will erect \$75,000 courthouse; N. W. Overstreet, Archt., Jackson.

Miss., Hattiesburg—Forrest County will alter and erect addition to courthouse; about \$50,000; brick and frame; composition flat roof; tile and wood floors; Emmett J. Hull, Archt., Jackson. Address Board of Supervisors, Hattiesburg. (Lately noted.)

Miss., Rosedale—Bolívar County will erect courthouse; 1 story; brick; composition roof; stone and terra cotta trim; terrazzo floors; Kramer & Lindsay, Archts., Kress Bldg., Jackson; contract August 1.

Dwellings.

Ark., Little Rock—J. M. Readinger, Pine Bluff, will erect bungalow, Willow and 2nd Sts.

D. C., Washington—S. Shapiro will erect six 2-story brick dwellings, 1308-18 Buchanan St., N.W.; \$50,000; owner builds.

D. C., Washington—G. Van Holsen will erect 2 dwellings, 6014 and 6012 31st St., N.W.; \$9000 each; 1 and 2 stories; frame; owner builds.

Fla., Daytona—Dr. H. L. Merriday will erect dwelling at Cedar and S. Palmetto Sts.

Fla., Miami—F. C. Kniffen, Hollyoak, Del., will erect \$12,000 dwelling on Bay Road, Alton Beach sub-division, Miami Beach; Paist & Patterson, Archts., Miami.

Fla., West Palm Beach—A. L. Noble and others will erect 20 bungalows, Palm Beach north; \$3800 each.

Fla., West Palm Beach—Henry Pedley, Johnston City, Ill., will erect dwelling at Community Place. Address W. H. Thompson, Supt., Security Farms Syndicate.

Fla., West Palm Beach—William Steinmeyer, Johnston City, Ill., will erect dwelling at Community Place. Address W. H. Thompson, Supt., Security Farms Syndicate.

Ga., Augusta—Ferdinand Phinizy will erect \$20,000 Italian type dwelling, McDowell St.; brick and hollow tile; Spanish tile roof; hardwood floors; hollow fireproof tile; vapor heat; Willis Irvin, Archt.; contract July 15. (Lately noted.)

Ky., Louisville—Mrs. Marion E. Taylor will erect double residence, Midvale Rd. near Cherokee Park; \$100,000; brick and hollow tile; tile and composition roof; concrete, tile, marble and oak floors; hollow fireproof and interior tile; metal doors; city lights; E. T. Hutchings, Archt., 310 Columbia Bldg. (Lately noted.)

Ky., Louisville—Mammoth Realty Co., 608 W. Walnut St., will erect 6 cottages; \$2000 each; Burton and 8th Sts.; frame; asphalt shingle roofs; pine floors; warm air heat; Samuel Plato, Archt., 608 W. Walnut St.; owner builds.

La., New Orleans—A. Allmont will erect \$15,000 dwelling, St. Charles and Lowerline Sts.; owner builds.

La., New Orleans—Max Singer will erect \$10,000 bungalow, Calhoun and Freret Sts.; also \$1500 double cottage at Fern and Olive Sts.; owner builds.

Md., Baltimore—Broring Building Co., will erect 13 2-story brick dwellings, 3801-25 Belair Ave.; total \$35,000.

Md., Baltimore—Geo. W. Schoenhals, 101 S. Linwood Ave., will erect 18 two-story brick dwellings, 901-35 N. Bentalou St.; 16x57 ft.; slag roofs; hot water heat; \$35,000; Jos. F. Hirt, Archt., 829 N. Luzerne St.; owner builds. (Lately noted.)

Md., Baltimore—Herbert C. Forrester, 20 E. Lexington St., will erect 5 bungalows, 2220-28 Poplar Grove St.; \$15,000; 1-story; brick.

Mo., Columbia—Presbyterian Church will erect \$10,000 manse. Address The Pastor.

Mo., St. Louis—Anselmo & Attilio Beffa will erect 2 buildings, Olive St. near Taylor Ave.; stores on first floors.

N. C., Winston-Salem—N. S. Booe will erect building on Hyde Ave., West Highlands.

Okl., Tulsa—Horn & Onan will erect \$15,000 dwelling and garage, Cincinnati St. and Sunset Dr.; 2 stories; brick; also \$5000 bungalow, 1725 S. Quaker St.

S. C., Abbeville—Abbeville Presbyterian Church will erect manse. Address The Pastor.

S. C., Columbia—T. W. Walters will erect \$10,000 dwelling, 1500 block Pendleton St.; brick; 9 rooms.

S. C., Gaffney—R. A. Jones will erect 6 dwellings on S. Limestone St.; 6 and 7 rooms.

S. C., Spartanburg—Arthur Miller will erect \$11,000 bungalow on Highland St.

Tenn., Knoxville—General Bldg. & Finance Co., will erect 4 dwellings, 1702-4-6-8 Forest Ave.; \$6000 each; frame; 6 rooms.

Tenn., Memphis—Frank C. Milton will erect \$25,000 dwelling on Harbert Ave. near Belvedere Blvd.; stonekote on metal lath; 2 baths; Charles Deas, Archt.

Tenn., Nashville—R. R. Ogilvie will erect 2 dwellings, 912-14 Grove St.; 1 story; frame; 6 rooms; total \$10,000.

Tex., Austin—G. E. Bryson will erect \$15,000 dwelling in Enfield; 2 stories; brick and tile.

Tex., Dallas—Mrs. J. Schepps will erect \$15,000 dwelling, 2403 S. Boulevard; 10 rooms; brick veneer.

Tex., Dallas—Dines Building Co. will erect \$17,000 dwelling, 5620 Gaston St.; 2 stories; brick veneer.

Tex., Dallas—M. F. Fooshee will erect 8-room brick veneer dwelling, 3626 Armstrong St.; \$10,000.

Tex., Dallas—H. C. Headington will erect 20 dwellings, 5723 Llano St., 2738 Fitzhugh St.; frame; total \$6500; 5302-06-10-14-18-22-26-30 Gunter St., 5303-07-11-15-19-23-27-31 Phillips St. and 1012-16 S. Henderson St.; 5 rooms each; total \$54,000.

Tex., Dallas—Perry Investment Co., F. Gordon Perry, Prest., 615 Good St.; number of dwellings, Perry Heights addition; Marian F. Fooshee Archt., owner builds. (Lately noted.)

Tex., El Paso—Mrs. Ella B. Robinson will erect 4 bungalows, block 33, Government Hill Addition; total \$10,000; brick.

Tex., Houston—R. M. Farrar will erect \$31,540 residence, block 20, Lovett Blvd.; 2 stories; brick and tile.

Tex., Houston—Ella Norrell Leavell will erect 2-story dwelling and garage, W. Alabama St. and Roseland Ave.; \$10,000.

Tex., Houston—D. E. Japhet, Jr., will erect

\$42,800 dwelling, block 8, Montrose Blvd.; 2 stories; brick and tile.

Tex., Houston—Max Westheimer will erect \$12,500 dwelling, Yoakum Blvd. and W. Main St.; brick veneer.

Tex., Houston—R. R. Ratliff will erect \$10,000 dwelling, Montrose Blvd. near Woodrow Ave.; 2 stories; brick veneer.

Tex., Houston—Russell Brown Co. will erect 2-story frame and stucco dwelling, Caroline St. near Ruth Ave.; \$11,500; also 2-story brick veneer dwelling, outhouse and garage, 2 stories, Sull Ross Ave. near Jack St.; \$8500.

Tex., Houston—Max Schuitzer will erect 9-room brick veneer dwelling and garage, Eagle and Caroline Sts.; \$19,000.

Tex., Houston—A. G. Thackberry will erect \$12,500 dwelling, 4615 Caroline St.; 2 stories; brick veneer.

Tex., Houston—Mrs. Elmore C. White will erect \$25,000 dwelling, Main Blvd. and Oakdale Ave.; 2 stories; brick veneer.

Tex., San Antonio—George Eichlitz will erect dwelling on McCullough Ave.; 2 stories; frame; Atlee B. and Robt. M. Ayres, Archts.

Va., Richmond—Mrs. L. E. Harrison will erect \$18,000 dwelling, Hampton Gardens; G. Herbert French, Archt.

Va., Richmond—C. F. Cauer will erect 7 dwellings in West End; total \$60,000; G. Herbert French, Archt., Times-Dispatch Bldg.

Va., Roanoke—S. A. Duerson will erect brick coased dwelling, 610 Grandin Rd.; \$12,000.

W. Va., Charleston—W. B. Weaver will erect \$10,000 dwelling, Linden and Oak Aves.; 2 stories; frame.

W. Va., Charleston—Robert Miller will erect \$10,000 dwelling on Kanawha Ave., Kanawha City, near 25th St.; 2 stories and basement; stucco.

Hospitals, Sanitariums, Etc.

Ark., Conway—Chamber of Commerce and number of physicians plan hospital.

Ark., Little Rock—City, Mayor Brickhouse, will complete hospital; \$225,000; fireproof; 5 stories and basement; concrete; 2 electric elevators; Jno. P. Almand, Archt.; bids opened July 15. (Lately noted.)

La., New Orleans—Charity Hospital, Dr. Wm. W. Leake, Supt., will erect \$90,000 building, Tulane and Villere Sts.; Favrot & Livaudais, Archts. (Lately noted.)

Miss., Meridian—City, W. E. Hopkins, Chrmn. Hospital Bldg. Comm., will erect East Mississippi Charity Hospital; \$100,000; 4 stories; pressed brick; 234-ft. frontage; wings; Burt Stuart, Archt. (Previously noted.)

Mo., Springfield—Sisters of Mercy will erect \$175,000 build at St. John's Hospital, N. Main and Nicholas Sts.; Geo. D. Barnett, Archt., 949 Century Bldg., St. Louis. (Lately noted.)

Okl., Muskogee—Oklahoma State Hospital Comsn., Severs Hotel, receives bids until July 16 to erect 2-story chief medical officer's residence, 5 bungalows, nurses' home and vocational training building at U. S. Veterans' Hospital, Honor Heights; Chas. P. Nieder and Maurice Jayne, Archts., Oklahoma City; plans and specifications from F. M. Olston, Asso. Archt., Mayo Bldg., Tulsa.

Tex., Kerrville—Building Board, American Legion Memorial Sanatorium, care Board of Control, Austin, will receive bids until July 29 to alter subsistence building and erect store building; plans and specifications

from Phelps & Dewees, Archts., Gunter Bldg., San Antonio.

Tex., Seymour—Baylor County votes in August or September on bonds to erect \$65,000 hospital; 3 stories and basement; fireproof; brick; tile floors; steam heat; electric lights; elevators, \$5000; C. J. Pate, Archt., Wichita Falls.

Va., Norfolk—Treasury Dept., J. A. Wetmore, Act. Supervising Archt., Washington, D. C., receives bids until July 31 to erect exclusive of mechanical equipment, additional wing to main building, U. S. Public Health Service Hospital, Tanner's Creek; drawings and specifications from Neal A. Melick, Supt. of Construction at site, or from office Supervising Archt.

Va., Richmond—Johnson-Willis Hospital will erect \$200,000 building on Boulevard opposite Battle Abbey.

Hotels.

Fla., West Palm Beach—Franklin Sheen Estate; remodel and enlarge 3 stores on Clematis Ave.; \$10,000; metal ceilings; skylights; steel, stone and plate glass fronts; H. G. Mitchell, Contr.

Fla., Winter—Haven—J. T. Keefe will erect 3-story hotel; \$45,000; 48 rooms; Jno. T. Biggar, Archt., Tampa.

Tenn., Memphis—Memphis Hotel Co., will expend \$50,000 to remodel Peabody Hotel, Main St. and Monroe Ave.; Hanker & Cairns, Archts.

Tenn., Newport—Mrs. C. B. Mims will erect hotel on Church St.; 37 rooms; also erect number cottages in connection.

Miscellaneous.

D. C., Washington—Market—Morris Cafritz will erect \$100,000 market, 3507-17 Georgia Ave., N.W.; 1 story; brick.

Fla., Gainesville—Clubhouse—Catholic Club will erect clubhouse; \$30,000; 80x80 ft.; brick; rock trim; tile floors; cement and iron stairway.

Mo., Kansas City—Market—H. B. Schoolfield, Cleveland, Ohio, is reported to erect \$1,000,000 market, 24th St., Grand Ave. and McGee Rd.; 6 stories with tower of equal height; 235 ft. on Grand Ave., 115 ft. on 24th St. and 138 ft. on McGee Rd.; fireproof; reinforced concrete frame; terra cotta walls; market on 2 floors; offices above. W. S. Ferguson Co., Engr.-Archt., Cleveland.

W. Va., Princeton—Clubhouse—Mercer Country Club will erect clubhouse near Princeton; \$50,000; 144x50 ft.; 2 stories and basement; frame; wood and tile floors; Alex. B. Mahood, Archt., Bluefield; A. I. Gross & Co., Bramwell, contr. for foundation. (Previously noted.)

Railway Stations, Sheds, Etc.

Tex., Alice—Texas-Mexican Ry., M. T. Cogley, Prest., Laredo, will erect depot.

Schools.

Ala., Mobile—School Commissioners will erect 14-room school for Burnt Dist.; also 5-room addition to Clarke School.

Ark., Canoe—School Board will erect \$20,000 high school; 9 classrooms, library, office and auditorium to seat 500.

Ark., Little Rock—North Little Rock School Board, E. O. Maness, Secy., plans to erect building.

Fla., Plant City—City plans \$60,000 bond issue to erect and repair schools.

Ga., Atlanta—Georgia School of Technology will receive bids until July 21 to erect physics building; \$200,000; 100x112 ft.; 3 stories; reinforced concrete and hollow

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tile; brick and limestone exterior; tar and gravel roof; interior tile; hardwood floors; bids addressed to Robert & Co., Archts.-Engrs., Red Cross Bldg.; Francis P. Smith, Asso. Archt. (Previously noted.)

Ga., Atlanta—City Board of Education will erect following schools: Northwest junior high school, Mayre & Alger, Archts.; Fraser Street replacement, Harralson Bleckley, archt.; Virginia Avenue replacement, Warren C. Powell, archt.; Ivy and Calhoun Street replacement, C. E. Frazier, archt.; unit at Ludie Avenue school, Charles H. Hopson, archt.; English Avenue annex, Daniel & Beutell, archts.; East Atlanta annex, J. F. Downing, archt.; Roach-Mitchell Street replacement, colored, C. E. Choute, Archt.; preliminary plans being prepared for following schools: Boys' high school, Hentz, Reid & Adler, archts., and Robert & company, associate archts.; negro senior-junior high school, E. C. Wachendorf, archt.; northeast junior high school, Pringle & Smith, archts.; Faith school replacement, W. J. J. Chase, archt.; Formwalt replacement, DeFord Smith, archt.; Pittsburgh, colored, G. Lloyd Preacher, archt.; Summer Hill colored, Burge & Stevens, archt.; A. Ten Eyck Brown, Supervising Archt. (Previously noted.)

Ga., Barwick—School Board will erect \$15,000 high school and auditorium.

Ky., Frankfort—County Board of Education, N. J. Parsons, Supt., will erect school in Camp Pleasant School Dist.

Ky., Louisville—Trinity Council, Y. M. I., will reconstruct gymnasium; \$10,500.

La., Baton Rouge—Louisiana State School for Blind, A. H. Caldwell, Supt., will erect 2-story building; \$50,000; 30 x 60 ft.; brick and frame; composition roof; wood floors; low pressure steam heat; Favrot & Livaudais, Archts., Hibernia Bank Bldg.; bids opened July 10. (Lately noted.)

Ky., Russell—Board of Education, O. W. Stennett, Clk., will erect high school; Murray & Stover, Archts., Ironton, Ohio.; bids opened July 12.

La., Baton Rouge—Rev. L. Lawrence is interested in erection of \$30,000 school and rectory; 2 stories; Burke & Dufrechou, Archts., 411 Balter Bldg.

La., Farmerville—Union Parish School Board, J. N. Warner, Prest., will erect \$25,000 building; brick; composition roof; wood floors. (Lately incorrectly noted at Ky., Farmerville.)

La., New Orleans—August Nolde will erect 3-story store on N. Rampart St.; 3 stories; 34 x 128 ft.; brick walls; reinforced concrete foundations; steel columns and girders; tile floors; steel sash; composition roof; sprinkler system; elevator; H. G. Markel, Archt., 224 Whitney Central Bldg.

La., Pioneer—School District No. 10 will vote on \$20,000 bonds and School Dist. No. 4 on \$36,000 bonds. Address Dist. School Trustees.

Miss., Black Hawk—Carroll County School Board, Carrollton, will erect building.

Miss., Canton—Canton School Dist. Trustees will erect high school, etc.; plans to issue \$125,000 bonds.

Miss., Carrollton—Carroll County School Board, will consolidate Seven Pines, Friars Point, Grassdale and McCarley schools and erect building.

Miss., Lizana (P. O. Saucier)—Lizana Consolidated School Dist. Trustees will erect building.

Miss., Madison Station—Board of Education will erect \$17,000 school; N. W. Overstreet, Archt., Jackson.

Miss., Picayune—School Board will erect building; plans to issue \$65,000 bonds.

Miss., Pickens—Board of Education will erect \$20,000 school; N. W. Overstreet, Archt., Jackson.

Miss., Shaw—Board of Education will erect \$75,000 school; N. W. Overstreet, Archt., Jackson.

Mo., Reeds Springs—School Dist. Trustees will erect building; \$10,000 bonds available.

N. C., Asheville—Buncombe County Board of Education, Frank L. Wells, Supt., receives bids until July 14 to erect additions and alter following schools; Grace, 5 classrooms, auditorium and gymnasium; Leicester, 7 classrooms, auditorium and gymnasium; Haw Creek, 5 classrooms, auditorium and gymnasium; Woodfin, 8 classrooms; Barnardsville, 4 classrooms; Weaverville, 2 classrooms; bids on one or more of all buildings; brick; built-up roof; wood and concrete floors; steam heat; electric lights; plans and specifications at office Smith & Carrier, Archts. (Lately noted.)

N. C., Fairview—Buncombe County Commissioners will soon call election on \$40,000 bonds to supplement \$15,000 already available to erect high school; 12 classrooms, auditorium and gymnasium; brick; Frank L. Wells, Supt., Board of Education, Asheville. (Lately noted.)

N. C., Fremont—School Board, J. B. Lane, Chrmn., will receive bids until July 14 to erect building; \$175,000; reinforced concrete; plans and specifications at office Benton & Benton, Archts., Wilson. (Lately noted.)

N. C., Siler City—School Commrs., R. F. Paschal, Secy., will receive bids until July 26 to erect building; plans and specifications at offices Chas. C. Wilson, Archt., 804-9 Palmetto Bldg., Columbia, S. C., and 105 Davis Bldg., Wilson, N. C.; also offices Chamber of Commerce, Charlotte and Raleigh, N. C.; obtainable at Columbia office architects.

N. C., Wake Forest—School Board, R. B. White, Chrmn., will erect brick building; Frank B. Simpson, Archt., Raleigh; bids opened July 10.

Okla., Fox—School Dist. Trustees will erect building; brick.

Okla., Halleyville—City Board of Education, W. A. Hower, Clk., will erect addition to and repair high school; A. C. Davis & Son, Archts., Shawnee.

Okla., Loveland—School Board, L. A. Bacon, Clk., will receive bids until July 15 to erect 1-story brick school; plans and specifications at office Butler & Huseman, Archts., Chickasha.

Okla., Nowata—School Board, Consolidated School Dist. No. 36; school building; Christian Jensen, Archt., Oklahoma City; Simpson Bros., Nowata, contr. for plumbing at \$4294. (Lately noted.)

Okla., Stillwater—Sigma Phi Epsilon Fraternity will erect frat house on Hester St.; \$17,000; 100 x 125 ft.; 3 stories and attic; Redlich & Patterson, Archts.

S. C., Columbia—School Commrs., A. C. Moore, Chrmn., receive bids until July 20 to erect addition to high school; plans and specifications at office Jas. B. Urquhart, Archt., Palmetto Bank Bldg. (Lately noted.)

S. C., Conway—Hendrix College, Dr. Jno. Hugh Reynolds, Prest., will erect building; 2 stories; frame; H. C. Hibbs, Archt., Nashville, Tenn.

S. C., Gaffney—Cherokee County Board of Education, W. C. McArthur, Supt., authorized bonds as follows to erect schools at Draytonville, No. 17, \$4000; Love Springs, No. 23,

\$6000; Goucher, No. 16, \$6500; Golden Springs, No. 28, \$15,000. (Lately noted.)

Tenn., Harriman—Woman's Board of Home Missions of Presbyterian Church, will erect combination academic, administration and dormitory building for Mission School for Girls; \$50,000; 2 stories and basement; 141 ft. frontage; brick and hollow fireproof tile; slate roof; maple and concrete floors; steam heat; electric lights; bids opened about Aug. 15. Address R. F. Graf & Sons, Archts., Knoxville. (Lately noted.)

Tenn., Memphis—St. Mary's Episcopal School, W. Eugene Stansbury, Chrmn. Bldg. Comm., plan \$100,000 building.

Tex., Caldwell—School Board, D. L. Alford, Prest., will erect \$100,000 building; 2 stories; reinforced concrete; C. H. Page & Bro., Archts., Austin. (Lately noted.)

Tex., Clifton—Clifton College will erect administration building; 3 stories; brick and concrete; stone trim; P. G. Silber & Co., Archts., San Antonio.

Tex., Colorado—School Board; 14-room school; fireproof; L. H. Gaskins, Archt., \$60,000 bonds available.

Tex., Commerce—School Board, Cameron Brecheen, Chrmn. Bldg. Comm., will erect high school; \$150,000.

Tex., Longview—School District Trustees, J. W. Dalston, Prest., will erect 6-room brick addition to First Ward School; \$20,000; Jno. Carpenter, Archt., Marshall; bids opened July 10.

Tex., Maysfield—Trustees, Maysfield School Dist. No. 63 will erect 2-story brick school; \$17,000; Jas. F. Chadwick, Co. Supt., Cameron. (Previously noted.)

Tex., Port Arthur—School Dist. Trustees will erect additions to high school and DeQueen School; also build at Griffing; \$675,000 bonds voted.

Tex., Reagan—School Board will improve and erect additions to buildings; also erect economics cottage; \$10,000 bonds voted.

Tex., Roscoe—School Dist. Trustees will expend \$10,000 for school improvements.

Tex., Sealey—School Trustees, R. A. Engelking, Secy.; \$32,000 high school; Alfred C. Flinn, Archt., Goggan Bldg., Houston; J. E. McGillicuddy, Houston, Contr.

Tex., Taylor—School Board, E. H. Lawhon, Prest., will erect \$115,000 high school; concrete hollow fireproof; asbestos built-up roof over concrete slab; ornamental terra cotta; tile, mastic, wood and cement floors; steel sash and trim; interior tile; metal doors; wire glass; ventilators; steam vacuum heat, \$7000; Giesecke & Harris, Archts.

Tex., Waco—Baylor College, Dr. S. P. Brooks, Prest., will erect library to replace structure previously noted burned; \$150,000; Birch D. Easterwood, Archt.

Va., Roanoke—St. Andrews Catholic School, Father Kellner in charge, will erect addition; \$25,000; 2 stories; brick; 38x80 ft.; brick.

W. Va., Fairview—Paw Paw Dist. School Trustees will erect 4-room addition to building, 4 rooms, gymnasium and auditorium to school at Grant Town; 4 classrooms and gymnasium to school at Rivesville.

W. Va., Huntington—Board of Education will remodel Central Junior High School; \$65,000; Richard M. Bates, Archt., will supervise work; remodel and fireproof Buffington School; \$10,000 to \$15,000; 2 stories; S. L. & R. L. Day, Archts., First National Bank Bldg., will receive bids until July 28; also improve Washington School. (Lately noted.)

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Stores.

D. C., Washington—L. Stearman will erect five 1-story brick stores, 3146-54 Mt. Pleasant St., N. W.; construction by owner.

Fla., Plant City—Mayor W. E. Lee and C. E. Barnes will erect \$70,000 theater, store and apartment building; 2 stories; 105x105 ft.; brick and steel; M. Leo Elliott, Archt., Tampa.

Fla., Sanford—Milane Amusement Co. (Frank Miller and others) will erect \$35,000 theater; 52x117 ft.; tile, hollow fireproof tile and stucco; cement floors; metal ceilings; seat 1000. (Lately noted.)

Fla., St. Petersburg—Ellis Wright will erect 6-story store and office building, Central Ave. and 10th St.; steel and brick; H. E. Wendell, Archt.

Ga., Atlanta—Joel Hunter will erect \$14,500 1-story brick building, Peachtree and 11th Sts.

La., Baton Rouge—Bahlinger Furniture Co. will erect store.

La., Baton Rouge—Chas. Cangelosi will erect building on Lafayette St.

La., New Orleans—Coste & Frichter will erect store and dwelling at Dauphine and St. Phillip Sts.; 2 stories; 34x70 ft.; brick and hollow fireproof tile; T. L. Perrier, Archt., Marine Bank Bldg.

La., New Orleans—H. Handlemann rejected bids to erect store at Dryades and Felicity Sts.; 3 stories; 80x100 ft.; brick and mill construction; composition roof; Weiss & Dreyfous, Archts., Maison Blanche Bldg. (Lately noted.)

Md., Baltimore—Moses Levin, 1427 W. Baltimore St., will rebuild structure noted burned.

Mo., Kansas City—Jno. A. Crosby will erect store, 1520 Locust St.

Mo., Kansas City—Jno. Spiteaufsky will erect stores, 44th St. and Brooklyn Ave.; site 55 x 100 ft.

N. C., Charlotte—Geo. and Chas. Hamilton will erect \$10,000 building for Shaw Tire Co.; 60x100 ft.; brick; Louis G. Sutherland, Archt.; J. P. Propst, Contr.

N. C., Charlotte—B. F. Wellons will erect store on 4th St.; \$10,000; 2 stories; brick.

N. C., Lexington—Citizens Building Corp. will erect business building, Main and First Sts.; 2 or 3 stories; \$15,000 to \$20,000.

Okla., Tulsa—Henry Heilbron will reconstruct old Royal Theater, 4th and Main Sts., for store; \$25,000.

Tex., Corpus Christi—Gugenheim-Cohn Co. will erect 1-story business building on Chaparral St. to replace burned structure.

Tenn., Chattanooga—J. A. Wardlaw will erect three 1-story brick buildings; McCallie Ave. between Spruce St. and Belt R. R.; \$10,000.

Tex., Dallas—Mrs. A. M. Countryman will erect brick stores, 106-12 Beckley Ave.; \$14,000.

Tex., Dallas—J. D. Smith will erect 1-story brick store, 1411 N. Haskell Ave.; \$10,000.

Tex., New Braunfels—Giesecke & Harris, Littlefield Bldg., Austin, are preparing plans for store; \$25,000; 1 story and basement; fireproof.

Tex., Waco—F. C. Rahlmann and Davidson & Whitman will convert auditorium into business building. (See Apartment Houses.)

Va., Roanoke—Jacob Schnurman will erect 6 stores, Roanoke St. and Franklin Rd.; \$10,000; brick.

Va., Roanoke—Chas. F. Nelson will erect \$12,000 building, Salem Ave.

W. Va., Bluefield—Eureka Hardware Co. will remodel and erect addition to store on Bland St.; concrete floors.

W. Va., Wheeling—Mrs. Carolina Myers will erect store and apartment building on Main St.; 36 x 90 ft.; 2 stories; Miller Bros., S. 4th St., low bidders.

Theaters.

La., Baton Rouge—Elks Theater, 3rd and Florida Sts., will erect building.

Mo., Independence—A. E. Elliott will erect \$65,000 motion picture theater; seat 1200.

Tex., Dallas—Popular Amusement Co. (Leon Gohlman and associates) will erect \$50,000 theater, 1519-21 Elm St.; Bertram C. Hill Co., Archt. (Lately noted.)

Warehouses.

Ga., Atlanta—General Electric Co. will erect 4-story concrete and steel warehouse and concrete garage; \$150,000.

N. C., Walnut Cove—Tobacco Growers Warehousing Assn., A. J. Fair, Chrmn., Bldg. Comm., will erect \$15,000 building; 100 x 200 ft.; frame; fireproof composition roof; wood or cement floors; Stanhope S. Johnson, Archt., Lynchburg, Va.; bids opened July 5. (Lately noted.)

Tex., Dallas—F. J. Glenn will erect \$16,500 warehouse, 1410-12 Federal St.; 2 stories; brick.

Homestead Assn.; \$11,000 duplex building, Gen. Pershing and Napoleon Aves.; frame; Joseph Dresner, Contr.

La., New Orleans—Savings & Homestead Assn.; duplex apartment, Napoleon Ave. and Jena St.; \$10,305; Peter Rausch, Contr.

Okla., Muskogee—English Realty Co. of St. Louis will erect Kenmore Apartments, 10th St. and Okmulgee Ave.; 42x142 ft.; 3 stories and basement; brick and frame; hollow fireproof tile; hardwood floors; stone trim; 200 rooms; Dickmann & Niemann, Archts.-Contrs.

Tenn., Knoxville—Gen. Bldg. & Finance Co.; Fort Sanders Manor, Laurel and Clinch Aves.; \$150,000; brick walls; semi-fireproof; composition flat roof; oak floors; hollow fireproof tile; steam heat; 35 apartments; courts, 100x40 ft.; Barber & McMurray, Archts.; J. M. Dunn & Son, Contrs.

Tex., El Paso—Elion Bros.; \$11,000 building, block 16, Sunset Heights addition; 1

story; 50x120 ft.; brick; composition roof; oak floors; electric lights; Hatcher & Owens, Archts.-Contrs.

Tex., Houston—Joe Levinson will erect \$14,000 building, Polk Ave. and St. Emanuel St.; 2 stories; brick veneer; 4 apartments; Chestnut & Martin, Contrs.

Tex., San Antonio—Mrs. A. Levysen & Son; building on Tobin Hill; frame; 4 apartments; David A. Lown, Archt.; H. H. Mayben, Contr.

Association and Fraternal.

La., Baton Rouge—Knights of Columbus will remodel building; Heartfield & Heartfield, Contrs., at \$17,607; W. C. Joubert, wiring and ventilating, \$1900; American Heating & Plumbing Co., New Orleans, plumbing and heating, \$3379.

Bank and Office.

Ky., Ashland—Ashland National Bank, Jno. A. Buckingham, Prest., Winchester Ave. and 10th St.; \$700,000 building; 100x100 ft.; 11 stories; Schenck & Williams, Archts., Dayton, Ohio; E. L. Archibald Co., Chicago, contr. for concrete work, \$98,254; Fort Pitt Bridge Works, Pittsburgh, structural steel, \$68,780; Standard Engineering Co., Pittsburgh, erecting and painting structural steel, \$16,200.

La., New Orleans—Continental Bldg. and Loan Assn.; 1-story brick office and shed, Thalia St., near Constance St.; \$10,990; Jan. A. Petty, Contr.

Tenn., Memphis—Central-State National Bank, S. E. Ragland, Prest.; 2-story addition; 38.5x75 ft.; Hoggson Bros., Contrs., New York and Chicago.

Tex., Colorado—National Bank, J. Thomas, Vice-Prest.; \$60,000 building, 2nd and Walnut Sts.; 2 stories and basement; 40x70 ft.; J. M. Morgan, Contr., Big Spring.

Churches.

Ky., Frankfort—First Christian Church, W. G. Simpson, Chrmn. Bldg. Comm.; church, 312-16 Ann St.; about 60x200 ft.; brick and stone; ordinary construction; tin and Barber built-up roof; tile and pine floors; electric lights; dumbwaiter; Leo L. Oberwarth, Archt.; Goin Bros., contrs., at \$99,463.

Md., Baltimore—Immanuel Reformed Church, Rev. J. C. Graul, Pastor, 2427 Arunah Ave.; \$87,250 church, Lanvale and Bentalou Sts.; stone; slate roof; concrete and wood floors; hollow fireproof tile; metal ceilings; metal doors; vaults; ventilators; ultimate cost of group \$200,000; John Freund, Archt., 1307 St. Paul St.; Edward G. Turner, Contr., 15 E. Fayette St.

Md., Baltimore—Emmanuel Protestant Episcopal Church, Cathedral and Read Sts., Rev. Hugh Birehead, Pastor; 2-story church and parish house; \$50,000; brick; 38.10x80 ft.; slate roof; steam heat; W. H. Ritter, Archt.; B. F. Bennett Building Co., Contr., 123 S. Howard St.

N. C., Mooresville—First Presbyterian Church; remodel church on Academy St., and erect Sunday school building; \$60,000; 3 stories; 65x80 ft.; brick; Ralph M. Brawley, Contr.

N. C., Sanford—East Sanford Baptist Church will erect \$12,000 building, North Ave. and 3rd St.; contracts let. Address The Pastor.

Tex., Ballinger—Baptist Church; \$37,000 building; 88x100 ft.; concrete, brick and hollow tile; asbestos 4-ply roof; wood and concrete floors; hot air heat; A. R. Swartz, Archt.; C. S. Burgraff, Contr.; both San Angelo; heating and painting not let.

BUILDING CONTRACTS AWARDED

Apartment Houses.

Fla., Stuart—John & Frank Coventry; building adjoining Coventry Hotel; 4 apartments; J. A. Y. Speirs, Contr.

La., New Orleans—Crescent City Building & Home Assn.; duplex apartments, White and Elba Sts.; \$11,296; Jos. M. DeFraitres, Contr.

La., New Orleans—Provident Building & Loan Assn.; duplex apartment, State and St. Charles Sts., 6th Dist.; \$13,000; 2 stories and basement; J. A. O'Brien, Contr.

La., New Orleans—M. Fertel; alter 3-story store and apartment building, S. Rampart and Julia Sts.; \$12,000; Weiss & Dreyfous, Archts., Maison Blanche Bldg.; W. R. Darenbourg, Contr.

La., New Orleans—Miss D. Weiss, 1034 Robert St.; \$13,000 building, S. Johnson and Prieur Sts.; 3 apartments; A. Garrett, Contractor.

La., New Orleans—Greater New Orleans

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Tex., Fort Worth—First Church of Christ, Scientist; \$100,000 building, 4th and Lamar Sts.; Roman classic style; auditorium, including balcony, to seat 1250; nursery in basement; contract let. Address The Pastor.

Courthouses.

S. C., McCormick—Town and McCormick County; \$70,000 courthouse and jail; face brick and hollow tile; slate roof; C. W. Cooper & Co., Contrs., Athens, Ga.

Dwellings.

Ala., Birmingham—Mrs. Catherine Erswell, 2701 Argyle Rd.; \$22,000 dwelling; tile roof; hardwood, wood block and concrete floors; hollow fireproof and interior tile; ornamental terra cotta; steam heat, \$1000; Warren, Knight & Davis, Archts., Empire Bldg.; J. E. Allen, Contr. Address Mrs. Erswell.

D. C., Washington—W. F. Sullivan; \$13,350 dwelling, 5608 37th St., N.W.; 2 stories; brick; H. D. Fulmer, Contr.

D. C., Washington—F. S. Bright; \$27,500 dwellings, 2741 Q St., N.W.; 2 stories; brick; W. E. Mooney, Contr.

D. C., Washington—M. E. Yost and A. C. Minnix; five 2-story frame dwellings, 4300-08 Brandywine St.; A. C. Minnix, Contr.

D. C., Washington—M. R. Inscow will erect 2 dwellings 2532-34 Tunlaw Rd., N.W.; 2 stories; brick; \$15,000; Walter Case, Contr., 817 G St., N.W.

Fla., Jacksonville—W. E. Johnson; \$10,000 dwelling on Avondale St.; 2 stories; tile; Leadley Ogden, Contr.

Fla., Miami—S. V. Hamly, Denver, Colo.; Spanish type dwelling facing Entrada; 74x54 ft.; automatic built-in ice machine, laundry, built-in garage; oak floors, tile in baths and shower rooms; 2 screened porches on first floor, 2 sleeping porches on second; Lee L. Wade, Archt.; A. B. Wade & Son, Contrs.

Fla., Miami—Edward Grosselli; \$14,900 dwelling, 1111 Meridian Ave.; City Builders' Finance Co., Archt.; Harry M. Hice, Contr.

Fla., West Palm Beach—W. S. Thomas, 211 N. Calvert St., Baltimore, Md.; \$25,000 dwelling, Coconut Row and Chilian Ave.; Spanish design; hollow tile and stucco; tile roof; garage and servants' quarters on second floor; Harvey & Clarke, Archts., American National Bank Bldg.; H. G. Mitchell, Contr.

Ga., Macon—Murphy, Taylor & Ellis will erect two \$5500 dwellings, one \$5000 and one \$6000; 6 rooms; brick veneer; 3 composition shingle and one metal shingle roof; oak and pine floors; interior tile; Arcola system heat; W. W. Walshall, C. J. Molton and W. G. Mangham, Contrs. (Lately noted in part.)

La., New Orleans—Dixie Homestead Assn.; \$10,070 dwelling, Broadway and Audubon St.; stucco; Sadler Construction Co., Inc., Contr.

La., New Orleans—Herbert S. Hiller; double cottage, Gen. Taylor and Rocheblave Sts., and 3 single cottages, Gen. Taylor and Delachaise Sts.; total \$14,000; wood; slate coated shingle roofs; wood floors; E. Fisher, Contr., 610 S. Peters St.

La., New Orleans—F. W. Siclair; \$19,500 single residence, Audubon and Broadway; Jones & Roessle, Archts.-Contrs.

La., New Orleans—M. Trecco, 2617 Upperline St.; \$13,000 bungalow, City Park and Morgan Blvd.; E. W. McKee, Contr.

La., New Orleans—Sisters of Immaculate Conception; \$24,869 dwelling, Dauphine St. near Colnet St.; 2 stories and basement; Geary-Onkes Co., Inc., Contr.

La., New Orleans—Anthony Denapolis; \$12,000 dwelling, Broad and Aubry Sts.; A. Roupich, Contr.

La., New Orleans—Mrs. J. H. Hammett; \$15,000 frame dwelling, Calhoun St. near Freret; Connell & Moore, Contrs.

La., New Orleans—Union Homestead Assn.; \$11,500 store and dwelling, Audubon and Cohn Sts.; Jacob Diassell, Contr.

Md., Baltimore—Edw. L. Winder, Vice-Prest., G. Ober & Sons Co.; 118,000 dwelling, Warrenton Rd. near Charles St.; 3 stories; brick and stucco; garage in basement; G. Walter Tovell, Contr., Eutaw & Madison Sts.

Md., Baltimore—Luther M. R. Willis, 13 Overhill Rd., Roland Park; dwelling and garage, Charles St. and Gibbons Ave.; 2½ stories; brick and hollow tile; Theo. W. Pietsch, Archt., American Bldg.; Consolidated Engineering Co., Contr., Calvert Bldg.

Md., Baltimore—T. C. Day, 5320 York Rd., 2-story brick store and dwelling; 44x54 ft.; slag roof; \$10,000; Jos. German, Contr., 4801 Crownson Ave.

N. C., Charlotte—Miss Marie Robbins and J. K. Robbins; 10 veneer bungalows, Scott Ave., near Myers Park; J. H. Carter, Contr.

Okla., Tulsa—Blair Bros., Archts.-Contrs., to erect \$30,000 dwelling and garage, 22nd and Norfolk Sts.

Okla., Tulsa—J. C. Carlin Haskell; \$30,000 brick dwelling and garage, 1612 S. Owasso St.; Blair Bros., Archts.-Contrs.

Okla., Tulsa—Pat McAndrews; \$12,500 dwelling and garage, 2116 S. Cincinnati St.; Blair Bros., Archts.-Contrs.

Okla., Tulsa—W. M. Thompson; remodel dwelling, 624 E. 19th St.; \$12,500; Blair Bros., Archts.-Contrs.

Okla., Tulsa—E. B. Whitewell; \$12,500 bungalow, 1317 Terrace Blvd.; 6 rooms; stucco; Blair Bros., Archts.-Contrs.

S. C., Camden—Osage Manufacturing Co., Camden and Bessemer City, N. C., will erect 47 operatives houses; Minter Homes Co., Contr., Greenville.

S. C., Clover—Hampshire Spinning Mills; 75 dwellings, 3 to 6 rooms each; Minter Homes Co., Contr., Greenville; O. H. Farris electric wiring.

S. C., Honea Path—Chiquola Manufacturing Co.; 132 operatives' houses; J. E. Sirrine & Co., Archts.-Engrs., Greenville; Harper Lumber Co., Contr., Honea Path.

Tex., Dallas—Horace H. Landauer; \$15,000 dwelling, 2409 Park Row; 41x41 ft.; brick veneer; composition shingle roof; oak floors; interior tile; hot water heat; Builders' Investment Co., Contr., Linz Bldg.

Tex., Iowa Park—W. F. George; \$45,000 residence; Taylor Bros., Contrs., Wichita Falls.

Va., Lynchburg—H. H. Harris; remodel dwelling, Rivemont and Easton Aves.; \$10,000; frame; shingle roof; hardwood floors; electric lights; S. S. Johnson, Archt.; W. D. Landrum, Contr.

Government and State.

Ga., Columbus—Officers' Quarters—Constructing Quartermaster will erect ten buildings for officers quarters at Fort Benning; 2 stories; brick and stucco; steam heat; Yeoman & McCraney, Contrs. at \$157,298.

Md., Edgewood—Barracks—M. A. Long Co., Munsey Bldg., has contract to erect 2 barracks for supply school, Edgewood Arsenal; hollow tile; 72x154 ft.; frame and hollow tile; wood floors; porches; total \$26,000.

Hospitals, Sanitariums, Etc.

Ala., Tuskegee—Noland-Clifford Co., Newport News, Va., has contract at \$313,659 for mechanical equipment for U. S. Veterans Hos-

pital for Negroes; boiler plant, outside heating, electric, water and sewer services. (Contractor lately incorrectly reported.)

Mo., St. Louis—Treasury Dept., Jas. A. Wetmore, Act. Supv. Archt., Washington, D. C.; 7 buildings for U. S. Veterans' Hospital, Jefferson Barracks; James Stewart & Co., New York and St. Louis, contr., at \$779,350; contract for mechanical equipment not let.

Tex., Dallas—Hella Temple, Ancient Arabic Order Nobles of Mystic Shrine, Sam P. Cochran, Chrmn. Hospital Comsn.; hospital for crippled children; \$250,000; administration building, 2 stories and basement; 1-story wards; fireproof; X-ray room, etc.; Herbert M. Greene Co., Archt.; Munn Construction Co., Contr.; plumbing, Wallace Plumbing Co.; J. Peyton Hunter, elevators.

Hotels.

Fla., Miami—Miramar Properties, Inc.; \$95,000 apartment hotel; 199x42 ft.; plaster beam and reinforced concrete; built-up roof; concrete, tile and wood floors; hot water heat; garbage incinerator; electric lights; E. A. Nolan, Archt., Haviland Bldg. Address Commercial Realty & Constr. Co., Contr., Haviland Bldg.

Mo., St. Joseph—Lee C. Broom, 519 Francis St.; \$100,000 hotel; 40x80 ft.; 6 stories and basement; brick; wood joists; tar and gravel roof; tile and wood floors; interior tile; metal doors; steam heat; electric lights; electric passenger elevator, \$6000; Walter C. Boschen, Archt., 6th and Francis Sts.; E. H. Lawhon Constr. Co., Contr., 905 Edmond St.

Miscellaneous.

Fla., St. Petersburg—Clubhouse—St. Petersburg Yacht Club, Lew W. Brown, Commodore; \$35,781 addition to clubhouse; Franklin J. Mason, Contr.

Md., Baltimore—Home—Jewish Children's Society will erect home at Belvedere and Green Spring Aves.; administration building, diagnostic building and cottage; brick; marble trim; slate roofs; steam heat; Jos. Evans Sperry, Archt., Calvert Bldg.; B. F. Bennett Bldg. Co., Contr., 123 S. Howard St.

N. C., Greensboro—Clubhouse—Greensboro Country Club, A. J. Klutz, Chrmn. Bldg. Comm.; \$50,000 clubhouse; 108x75 ft.; hollow tile and stucco; tile and gravel roof; cement, wood and tile floors; vapor heat; Chas. Barton Keen, Archt., 1218 Chestnut St., Philadelphia, Pa.; R. K. Stewart & Son, Contrs., High Point.

Tex., Lampasas—Fair—Lampasas Fair Association will erect grandstand to seat 1000, horse, hog, sheep and cow sheds, poultry house, stalls for horses and art exhibit building.

Railway Stations, Sheds, Etc.

Tex., Waco—Missouri, Kansas & Texas R. R., Frank Ringer, Ch. Engr., St. Louis; freight depot and warehouse; 50x400 ft. including wharves; 2 stories; reinforced concrete and brick; McKenzie Constr. Co., Contr., San Antonio.

Schools.

Ala., Munford—Talladega County Board of Education, Talladega; addition to consolidated school; contract let.

D. C., Washington—Howard University; \$16,000 repairs, 420 Fifth St., N. W.; Arthur L. Smith Co., Contrs., Woodward Bldg.

Fla., Gainesville—Bd. of Pub. Instruction, E. R. Simmons, Supt.; Newberry High School; Marshall Jackson Co., Lakeland, contr. at \$25,442; Waldo High School; Geo. McKay

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Co., Ocala, contr. at \$14,781; Edwards & Sayward, Archts.

Ga., Reidsville—School Board; addition to and remodel building; \$16,000; brick; metal shingle roof; C. O. Smith, Contr. (See Mch. Wanted—Blackboards; Stoves; I Beams; Hardware.)

Ga., Toombsboro—School Dist. Trustees; \$12,000 high school; brick; shingle roof; wood floors; stoves; Alexander Blair, Archt., Macon; C. O. Smith, Contr., Hazlehurst. (See Mch. Wanted—Blackboards; Stoves; I Beams; Hardware.)

Ky., Owensboro—Board of Education, J. L. Foust, Prest.; Paul Dunbar colored school; \$22,460; brick and stone; Arthur F. Hus-sander, Archt., 646 Clark St., Chicago; Wm. Davis, Contr., Owensboro.

La., Gibsland—School Board, \$51,250 high school; 2 stories; 12 classrooms and auditorium; brick; J. C. Corbin, Contr., Napoleonville.

Miss., Greenville—School Board will erect South Ward School; 6 rooms; brick; T. J. Harvey & Co., Archts., Hinds and Belleaire Sts.; Shepherd Bros., Contrs.

Miss., Laurel—Board of Education; \$100,000 high school; brick walls; reinforced concrete floors; steam heat; P. J. Krouse, Archt., Meridian; C. O. Eure Constr. Co., Contr., Hattiesburg.

Mo., Cape Girardeau—Southeast Missouri State Teachers' College Board of Regents; training school including kindergarten, grade and high school; combination auditorium and gymnasium; stone, hollow fireproof and interior tile; slate roof; hardwood and concrete floors; Study & Farrar, Archts., 1363 Arcade Bldg., St. Louis; Gerhardt Constr. Co., Contr., Cape Girardeau.

Mo., Kansas City—Board of Education; Yeager School, 19th St. and Indiana Ave.; \$120,000; 60 x 150 ft.; 2 stories and basement; fireproof; Barrett roof; concrete and linoleum floors; hollow tile; metal ceilings and doors; steel sash and trim; Louis Breitag & Son Constr. Co., Contrs., 3703 W. Prospect Pl.

N. C., Albemarle—County Board of Education, Chas. A. Reap, Supt.; schools at Albemarle and Aquadale; \$35,000; 58x75 ft.; 2 stories; brick; tin roof; wood floors; D. A. Holbrooks, Archt.-Contr.

N. C., Winston-Salem—School Board; building near Vade Mecum Springs; \$30,000; brick and stone; W. C. Northup, Archt., Winston-Salem; F. W. Fowler, Contr., High Pont.

N. C., Winston-Salem—School Board; \$300,000; Richard J. Reynolds Memorial auditorium, unit of high school group; 122x90 ft.; fireproof; slate and composition roof; cement, tile, marble and wood floors; metal doors; interior tile; ventilators; blower system of heat, \$25,000; seat 2500; Chas. Barton Keen, Archt., 1218 Chestnut St., Philadelphia, Pa.; Northeastern Constr. Co., Contr., Charlotte, and 101 Park Ave., New York; Grinnell Co., Winston-Salem, heating and ventilating.

Okla., Lawton—Board of Education, J. S. Kuntz, Clk.; \$47,795 ward school; \$156,025 junior high school; brick; Tonin & Bramblet, Archts., Oklahoma City; Wass & Wilson, Lawton, and W. S. Bellows, Oklahoma City, contrs. respectively.

Tex., Beaumont—South Park Independent School Dist., J. L. Gies, Secy.; high school, home economics cottage and negro graded school; high school; three stories; 250x210 ft.; home economics cottage; 45x100 ft.; negro school; 54x90 ft.; 2 stories; 6 rooms and auditorium; semi-fireproof and fireproof; brick and hollow fireproof tile; tar and gravel and asbestos shingle roof; rift pine, maple, cement and terrazzo floors; R. H. Hunt Co., Archt., Southwest Life Bldg., Dallas; Hartford & McDaniel, Beaumont, contrs. at \$175,317, for high school and \$9687 for cottage; Jack Davis, contr. at \$27,192 for negro school; E. Eastham Plumbing Co., Beaumont, plumbing for all buildings; Beaumont Electric Co., electric wiring.

Tex., Cisco—Board of Education; \$200,000 school; Johnson Constr. Co., Contr.

Tex., Dallas—Board of Education; \$74,883 school, Metropolitan and Lagow Sts.; Lang & Wittich Archts.; Lange & Trumpf, Contrs.; Hamilton Co., heating and plumbing, \$9390; bids for Austin School, Oak Cliff, opened July 12.

Tex., Decatur—School Bd., C. P. Gettys, Secretary; \$30,000 annex to high school; 2 stories and sub-story; brick; C. H. Leinbach, Archt., Deere Bldg., Dallas; John H. Dalton Co., Contr., Waxahachie.

Tex., Mexia—School Board, David Murphy, Secy.; \$150,000 high school; fireproof; DeWitt & Lemmon, Archts., Dallas; Sloan & Spontz, Contrs., Fort Worth; Modern Plumbing & Heating Co., Denison, heating, \$24,000.

Tex., Orange—Board of Education; \$76,000 school; fireproof; C. H. Page Bros., Archts.; Wattinger Bros., Contrs., both Austin.

Tex., Orange—School Board, Mrs. Ida Neff, Prest.; \$175,000 high school; steel and concrete; 40 classrooms; C. H. Page & Bros., Archts., Austin; McDaniel & Hartford, Contractors, Beaumont.

Va., Danville—Danville Military Institute; \$15,000 superintendent's quarters and dining hall; 32x72 ft.; lath and stucco; E. R. James, Archt.; Osborne & Son, Contrs.

Va., Mathews—Westville Dist. School Trustees; rebuild Lee-Jackson High School; \$29,000; 1-story; 71x118 ft.; 10 classrooms; seat 700; J. T. Callis, Contr., Tabernacle.

W. Va., Wheeling—Board of Education; additional story over boiler room at high school, Chapline St.; \$10,500; Parish Bros., Contrs., Youngstown, O.

Stores.

Ala., Union Springs—A. H. Cope will rebuild brick store; contract let.

Ark., Little Rock—Boyle Realty Co.; \$30,000 building for Enterprise Harness Co., W. Capitol Ave. and Spring St.; 2 stories; 48x

140 ft.; reinforced concrete; Barrett roof; concrete floors; Sanders & Ginnocchio, Archts., Urquhart Bldg.; Ault & Burden, Contr., Box 282.

Fla., Bradentown—Singletary & Cummings; \$15,000 building on Main St.; 2 stories; 50x125 ft.; stores on ground floor; offices and apartments above; concrete foundations; tile, brick and terra cotta; plate glass show windows; stone trim; asphalt 5-ply built-up roof; electric lights; Johnson & Fonda, Archts., Bradentown; E. W. Stoltz, Contr., Palmetto.

Fla., Fort Pierce—F. Holtzberg; remodel and enlarge building; \$20,000; 1 story; brick; H. F. Wildman, Contr.

Fla., Miami—Ralston Bros. Co. will erect \$135,000 building, E. Flagler St. and Third Ave.; Italian type; 4 stories; 100x133 ft.; roof garden; August Geiger, Archt., Miami; Geo. W. Langford Contracting Co., Contr., Louisville, Ky.

Ky., Louisville—Albert Hess Furniture Co., 552 E. Market St., will expend \$15,000 to remodel store; Clarence J. Stinson, Archt.; Castlewold Realty Co., Contr.

Ky., Pikeville—Mary Leslie; building to replace structure lately noted burned; T. J. Williamson, Contr.

La., New Orleans—Marjorie Realty Co.; \$10,000 building, Nashville and Magnolia Sts.; August Frank, Contr.

N. C., Lexington—Griff W. Smith has contract to erect store in Moffitt block on First Ave.; plate glass front.

Tex., Houston—Hogan-Alnoch Dry Goods Co.; \$92,000 store, Texas Ave. and Austin St.; 4 stories; brick; Don Hall, Contr.

Tex., San Antonio—E. Jacobs; \$18,000 store, E. Commerce and New Braunfels Ave.; brick; Henry T. Phelps, Archt.; Wagner & Schiffers, Contr.

Va., Lynchburg—J. R. Millner Co., B. K. Merryman, Prest., \$50,000 store to replace burned structure; 4 stories and basement; reinforced concrete; S. S. Johnson, Archt.; Jno. P. Pettyjohn & Co., Contrs.

Theaters.

La., New Orleans—Le Petit Theater; \$28,826 building, Chartres and St. Phillip Sts.; 2 stories; brick; Armstrong & Koch, Archts., 604 Maison Blanche Annex; Lionel F. Favre, Contr., Louisiana Bldg.

Warehouses.

N. C., Lexington—Erlanger Cotton Mills; cloth room and cloth storage building; 1 story; 229x69 ft.; J. E. Sirrine & Co., Archts.; Fiske-Carter Constr. Co., Contr., both Greenville, S. C.

Tex., Dallas—Southwest General Electric Co.; 3-story addition to warehouse, 801 N. Lamar St.; \$92,000; brick and concrete; stone trim; passenger elevator; Lang & Wittich, Archts.; Fred A. Jones Constr. Co., Contr.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Air Tools.—Deming Apparatus Co., 150 Nassau St., New York City.—Air tools.

Art. Glass.—Rev. E. O. Whitwell, Pastor, Presbyterian Church, Ada., Okla.—Art glass windows.

Automobile Trailer Parts.—Earle Wright Motor Co., Okmulgee, Okla.—Prices on truck trailer axes, wheels, castings and iron stock; also tires.

Belting (Rubber).—Tar River Lumber Co., Rocky Mount, N. C.—To purchase 48 ft. of 16-in., 10 ply best grade rubber belting.

Blackboards.—C. O. Smith, Hazlehurst, Ga.—Blackboards for schools at Toombsboro and Reidsville, Ga.

Boiler.—Board of Awards, Richard Gwinn, Register, Baltimore, Md.—Bids until July 19 to furnish and install new boiler on tug Baltimore; specifications obtainable at office of Harbor Board, Broadway Pier.

Boilers.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on 5 return tubular boilers.

Bottles.—D. P. Weeks, Plant City, Fla.—

To correspond with mfrs. of bottles for mayonnaise dressing.

Bottlers' Supplies.—Florida Bottlers' Co., H. F. Bixby, Mgr., 407 Masonic Temple, Jacksonville, Fla.—To correspond with mfrs. of bottlers' supplies; with view to representation in S. Georgia and Florida.

Boilers.—Duncan Machinery Co., (Mch. Dealers) 721 N. Central Ave., Knoxville, Tenn.—Prices on 60, 70, 80, 90 and 100 H.P. locomotive fire box boilers; 100 H.P. preferred that can be insured for not less than

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110 lbs. working steam pressure, 125 lbs. preferred; inspected and insured; Leffel or Scotch marine type boiler would answer if safe and insurable at not less than 110 lbs. steam and prefer at 125 lbs. working pressure; for use in Tennessee.

Box and Crate Machinery.—J. K. Coogler, Brooksville, Fla.—Prices on Haye's mortice and tenor; Chattanooga head and side rounding machine; Dalg nailing machine for 12 and 6 track; Chattanooga & Hoosier rip saw; Hooper printing press; complete line of mchy. for mfne. of orange boxes, except veneer.

Brass.—Joseph Stolz & Son, Commerce Ave., Highbridge Station, New York City—Jobbers' prices per lb., f. o. b. Jeffersonville, Ind., for following: 2000 ft. of $\frac{1}{2}$ -in., 2000 ft. of $\frac{3}{8}$ -in., 1500 ft. of $\frac{1}{2}$ -in., 1500 ft. of $\frac{1}{4}$ -in., 100 ft. of 1-in. and 50 ft. of $\frac{1}{2}$ -in., brass, cold rolled, hexagon stock, lengths 6 to 22 ft.; also 1000 ft. of $\frac{1}{2}$ -in., 100 ft. of $\frac{3}{8}$ -in., 50 ft. of $\frac{1}{4}$ -in., 500 ft. of $\frac{7}{16}$ -in., 200 ft. of $\frac{3}{8}$ -in., 50 ft. of $\frac{1}{2}$ -in., 100 ft. of $\frac{1}{4}$ -in., 2000 ft. of $\frac{3}{8}$ -in., and 200 ft. of $\frac{1}{2}$ -in. brass, cold rolled, round stock, lengths 6 to 22 ft.

Breakwater Construction.—U. S. Engr. office, Buffalo, N. Y.—Bids until July 17 to construct rubble mound extension of west breakwater, Ashtabula Harbor, O.; also construct east breakwater extension at Fairport Harbor, O., bids until July 27; further information on application.

Brick.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on approx. 100,000 good grade building and vitrified brick.

Bridge Construction.—Laurens County, Board of Commrs. Roads and Revenues, J. H. Witherington, Clk., Dublin, Ga.—Bids until July 13 for 3 bridges on Dublin-Tingle road, and 4 bridges on Dublin-Dexter road; reinforced concrete; steel; concrete paving; concrete guard posts; plans, etc. on file, from State Highway Div. Office, 202 Burch Bldg., Dublin, and State Highway Engr., Peachtree Bldg., Atlanta, Ga.

Bridge Construction.—State Highway Comsn., Raleigh, N. C.—Bids until Aug. 25 for probably 70-ft. low truss bridge; 70-ft. Bascule; five 40-ft. reinforced concrete deck girders; \$80,000; plans, etc., on file; C. M. Upham, State Highway Engr.

Bridge Construction.—Scott County Bridge Comrs., Geo. Forrester, Chrmn., Waldron, Ark.—Bids opened July 11 for bridge at Murphy Ford, over Fourche River; 280-ft. steel truss or reinforced concrete arch; steel bridge consisting of four 70-ft. spans on concrete piers and abutments; arch bridge of one 90-ft. and two 81-ft. spans; plans, etc., on file, or from State Highway Comsn., Little Rock.

Bridge Construction.—Palm Beach County Comrs., Hector Harris, Chairman, West Palm Beach, Fla.—Bids until July 15 for highway bridge across Indian River at Jupiter Narrows; plans, etc., from R. F. Goodman, County Engr.

Bridge Construction.—State Highway Department, Montgomery, Ala.—Bids until July 23 for 102.5-ft. and 80-ft. steel spans on road from Guin to Walker County line; 3,262.9 cu. yds. concrete; 382,554 lbs. reinforcing steel; plans, etc., from W. S. Keller, State Highway Engr., Montgomery, or Div. Engr., Decatur, Ala.

Bronze Gates, etc.—U. S. Mausoleum Co., 310 Bond Bldg., Washington, D. C.—Invite bids on bronze gates and trim.

Building Material.—M. A. Long Co., 1523 Munsey Bldg., Baltimore, Md., is estimating on erection of building for National Bank of Baltimore, 4 stories, 80x102 ft., and desires sub-bids and estimates until July 7.

Building Material, etc.—Atlantic Realty

Corp., 215 Courtland St., Baltimore, Md.—Prices on building materials and supplies.

Cement and Lime.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on about 20 cars of Portland cement.

Burlap and Canvas.—Alabama Concrete Products Co., Broad St. and Water Ave., Selma, Ala.—Prices on burlap and canvas suitable to cover 18 ft. concrete pavement.

Cans.—See Mixing Tank, etc.

Caustic Soda.—Bashi Mall Punna Lall, Amritsar, India—To purchase 10 tons caustic soda 76/77% in strong double metal drums of 5/6 cwt., net monthly delivery.

Cocoon Oil Soap Stock.—Kendall Products Corp., 709 6th Ave., New York City—To purchase cocoon oil soap stock.

Compressor (Air).—Deming Apparatus Co., 150 Nassau St., New York City—Belted air compressor, driven by gasoline engine.

Concrete Mixers.—J. T. Nuckols, 102 E. Main St., Richmond, Va.—First class second hand concrete mixers.

Concrete Work.—Harris County Commrs., Houston, Tex.—Bids until July 17 for concrete work around courthouse; H. L. Washburn, County Auditor.

Construction Machinery and Supplies.—U. S. Mausoleum Co., 310 Bond Bldg., Washington, D. C.—To purchase various kinds of construction machinery and supplies.

Contractors' Equipment, etc.—Noland-Clifford Co., Inc., Newport News, Va.—Prices on contractors' equipment, etc.

Cotton Press Cloth.—Dist. Commrs., Room 500, Dist. Bldg., Washington, D. C.—Bids until July 18 to furnish cotton press cloth for use at garbage reduction plant; further information apply to Room 320 Dist. Bldg.

Cotton Seed Oil Soap Stock.—Kendall Products Corp., 709 6th Ave., New York City—To purchase cotton seed oil soap stock.

Cooking Utensils.—C. D. Graves, 504 Bellone Ave., Dublin, Ga.—To correspond with mfrs. of cooking utensils in aluminum, copper and enamelware.

Crate Machinery.—Henry O. Williams, Berzella, Ga.—To correspond with mfrs. of mchy. for making Texas folding onion crate.

Crusher.—Security Cement & Lime Co., Hagerstown, Md.—Second-hand No. 7½ McCully crusher with trade in No. 8 Austin crusher.

Drag Line.—A. J. Harbers, Columbus, Tex.—Steam operated drag line with 60 to 100-ft. boom, 2½ yard or larger bucket; prefer machine on trucks; give shop number, condition, price and location.

Drainage.—Grand River Drainage Dist. Commrs., of Grundy County, Trenton, Mo.—Bids until July 17 to construct ditches, reclaiming about 10,000 acres; \$200,000.

Drainage.—Lawtell Drainage Dist. Commrs., C. N. Bertrand, Prest., Lawtell, La.—Bids until July 25 to construct gravity drainage system, excavate and dredge approx. 600,000 cu. yds. earth; plans with Albert Tate, Engr., Opelousas, La.

Dredges.—Chief of Engrs., 2802 Munitions Bldg., Washington, D. C.—Bids until Aug. 2 to construct 4 Diesel electric sea-going hopper dredges; further information on application.

Dredging.—U. S. Engr. Office, Room 710, Army Bldg., 39 Whitehall St., New York City.—Bids until Aug. 7 for dredging and rock removal in Bronx river, N. Y.; further information on application.

Fencing.—Willis & Pender, Greenwood, Fla.—To correspond with mfrs. of field fencing.

Drills.—Champion Tool Co., Inc., 642 W. Washington Blvd., Chicago, Ill.—In market

for large quantities of new, first quality high speed and carbon steel drills.

Dryer.—City of Beaumont, Tex., office of City Clerk—Bids until July 15 to furnish one horizontal type dryer complete, approximate 2250 lbs.

Electric Plants.—Duncan Machinery Co., (Mchy. Dealers) 721 N. Central Ave., Knoxville, Tenn.—Dealers' prices and catalogs on home electric plants for country home use, driven by smallest water power; plant supplied with about 20-ft. fall and about 80 gals. per min.; data on both smaller and greater amounts of water.

Electrolock.—Electrolock Mfg. Co., Vicksburg, Miss.—To contract for mfne. of the electrolock, safety device for automobiles.

Electro Plating Outfit.—Eisele & Co., Nashville, Tenn.—Prices on electro plating outfit.

Elevators.—Eureka Life Ins. Co., 9 E. Franklin St., Baltimore, Md.—Elevator for 6-story building.

Engine.—City of West Palm Beach, Fla., L. G. Biggers, Mayor.—Invite bids on engine, for fire protection system.

Engine.—Standard Electric Machinery Co., (Mchy. Dealers), 7 E. Hill St., Baltimore, Md.—500 to 800 H. P. compound condensing Corliss engine, 125 lbs., steam, zero superheat; state style of condenser; best price f. o. b. cars.

Engine (Crude Oil).—Carolina Ice & Packing Co., Darlington, S. C.—75 H. P. crude oil engine, either new or first-class condition.

Engine.—White Oak Corp. (Mchy. Dealers) Box 1094, Knoxville, Tenn.—150 H. P. Corliss engine.

Engines (Turbine).—Chas. A. Butler, Box 202, Okmulgee, Okla.—Prices on small turbine engines, from 1 to 3 H. P.

Engines (Gasoline).—Deming Apparatus Co., 150 Nassau St., New York City—Two large gasoline engines.

Garage Equipment.—J. E. Doherty, 2405 Granby St., Norfolk, Va.—Garage equipment.

Generators.—Hackley Morrison Co., (Mchy. Dealers) 16½ N. 9th St., Richmond, Va.—One 150 to 200 K. W., A. C. direct connected generator, 220 volt, left-hand connected outfit; one 300 KVA. 550 volt, 200 RPM, 3 bearing, A. C. generator, belted type, with exciter, base, switchboard, etc., complete.

Generator Set.—Louisiana Hospital for Insane, Pineville, La.—Invite bids on one vertical direct connected oil engine driven unit, 220 volt, 150 K. W. capacity, oil equipment necessary to make complete; to be delivered and erected by successful bidder; further information on application to chief engineer in charge.

Generator Sets.—Box 853, Seattle, Wash.—1000 KW or 1500 KW steam turbo-generator complete, also 750 or 1000 KW Corliss engine driven generator, 3 phase, 44 volt, 60 cycle; to work against a back pressure of 15 lbs., for sugar factory.

Glass.—Austin Floral Co., 722 Congress Ave., Austin, Tex.—Glass D S B 16x18, for greenhouses; f. o. b. Austin.

Greenhouse Ventilating Machinery.—Austin Floral Co., 722 Congress Ave., Austin, Tex. Prices on greenhouse ventilating machinery; f. o. b. Austin.

Hardware.—C. O. Smith, Hazlehurst, Ga.—Austral Hardware.

Hardware.—Champion Tool Co., Inc., 642 W. Washington Blvd., Chicago, Ill.—In market for surplus or obsolete stocks and factory seconds of general hardware lines.

Hoists (Chain).—U. S. Machine Shop, Box 424, Electra, Tex.—Prices on two 2-ton Triplex chain hoists.

I Beams.—C. O. Smith, Hazlehurst, Ga.—

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

16 15-in. steel I beams 18-ft. long, for Reidsville, Ga. school.

Incinerators.—Dist. Commrs., Room 500 Dist. Bldg., Washington, D. C.—Bids until July 17 to construct additional incinerators to trash plant, Mt. Olivet road at Montello Ave.; further information on application to Room 427, Dist. Bldg.

Jointer.—Jos. L. Pearson, Keysville, Va.—8 to 12-in. hand jointer, second-hand if in good condition.

Labels.—D. P. Weeks, Plant City, Fla.—To correspond with mfrs. of labels for mayonnaise dressing.

Lathe (Wood).—Jos. L. Pearson, Keysville, Va.—12-in. or larger wood lathe, consider second-hand if in good condition.

Levee.—Mississippi River Comsn., 1st and 2nd Dist., Custumt House, Memphis, Tenn.—Bids until July 20 to construct 690,000 cu. yds. earthwork in White river levee Dist.; further information on application.

Laundry Equipment.—Board of Awards, Richard Gwinn, City Register, Baltimore, Md.—Bids until July 12 for laundry equipment at Bay View Hospital and Asylum; J. F. Crowther, Inspector of Buildings.

Loaders (Ore).—Duncan Machinery Co., (Mchy. Dealers), 721 N. Central Ave., Knoxville, Tenn.—Jobbers' prices on new and used loaders for loading ore from ground into two-horse dump wagon or into freight cars.

Lumber.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on forming lumber 2x4, 4x4 and roofers.

Metal Working Plant Equipment.—Eisele & Co., Nashville, Tenn.—Prices on automatic and hand screw machines, punch, presses and special mchy. for mfrs. of surgical instruments.

Mills (Fuller-Cement).—Security Cement & Lime Co., Hagerstown, Md.—Eight second-hand Fuller mills with fan discharge.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, Gen. Pur. Officer, Washington, D. C.—Bids until July 21 to furnish: Centrifugal pumps; range boilers; corn brooms; duster brushes; camera stands; brass screws; machine bolts; fish plates; sidewalk lenses; billiard balls; duck pins; billiard table cloth; telephone cords; asbestos gaskets; floor wax; flax twine; emery cloth; floor brushes; bunting; whitening; liquid coal tar; creosoted piles, etc. Blank forms and information (Circular 2295) on application to Panama Canal; Asst. Pur. Agt., at Fort Mason, San Francisco, Cal.

Mixing Machines (Mayonnaise Dressing).—D. P. Weeks, Plant City, Fla.—To correspond with mfrs. of mayonnaise dressing machines.

Mixing Tank, etc.—Ideal Mfg. Co., 214 E. Travis St., San Antonio, Tex.—Prices on 100 liquid gal mixing tank, motor driven; also prices on pt., qt. and gal. cans, round or square, in 10,000 or less lots.

Motor (Electrical).—White Oak Corp. (Machinery Dealers) Box 1094, Knoxville, Tenn.—25 H. P., 3 phase, 60 cycle, 220 volt motor and several smaller ones.

Paint, etc.—Austin Floral Co., 722 Congress Ave., Austin, Tex.—Inside white paint and putty; f. o. b. Austin.

Paper.—Wallace Stevens, Mgr., Glades County Democrat & Printing Co., Moore Haven, Fla.—Prices on paper for printing plant.

Paving.—Allen J. Saville, Director of Public Works, Richmond, Va.—Bids until July 17 to grade and construct curb and gutters on various streets; \$30,000; plans, etc., on file.

Paving, Sewer Construction.—J. W. Karsten, Mayor, Kennett, Mo.—Bids until July 18 for street paving; 30,225 sq. yds. reinforced concrete pavement; 15,545 lin. ft. concrete integral curbing; 390 cu. yds. concrete for manholes and sewers; 36,430 lbs. reinforcing steel; 780-ft. 12-in. vitrified pipe; plans, etc., from Dave Stroud, City Clk., and C. E. Smith & Co., Engrs., Cape Girardeau, Mo.

Paving.—City, Board of Aldermen, Alamo, Tenn.—Bids until July 17 to construct 10,000 sq. yds. paving; concrete, gravel or natural rock; plans, etc., from L. O. Brayton, Engr., Dyersburg, Tenn.

Piling (Steel Sheet).—U. S. Engr. Office, Box 72, Louisville, Ky.—Bids until July 18 to furnish and deliver steel sheet piling for dam No. 44, Ohio river; further information on application.

Paving.—B. R. Hoper, Mayor, Covington, Va.—Bids opened July 11 for paving; 4300 cu. yds. grading; 8480 sq. yds. sheet asphalt, concrete base; 5050 lin. ft. plain concrete curb; 5350 lin. ft. concrete gutter, etc.; plans, etc., from C. P. Barnett, Const. Engr.

Molding Equipment.—David L. Moss & Co., Importers and Exporters, 60 Wall St., New York City.—Equipment to mold refined camphor into blocks and tablets.

Paving.—District Commrs., 509 District Bldg., Washington, D. C.—Bids opened July 12 to pave streets and avenues with sheet asphalt; plans etc. on file.

Paving.—City Comsn., John F. Floyd, Mayor, Spartanburg, S. C.—Bids opened July 11 for 8000 sq. yds. street paving and necessary storm drainage; plans, etc. from Harwood Beebe, Municipal Engr.

Paving.—J. C. Urquhart, Mayor, Cochran, Ga.—Bids until July 11 for 12,500 sq. yds. street paving; 5500 lin. ft. rock faced granite curbing; vitrified brick on 4-in. concrete base, sand cushion, asphalt filler; vitrified brick on sand and cement base; asphaltic concrete on concrete base, concrete gutters, or cement concrete pavement; plans, etc., on file, or from John H. Lowe, Engr., Albany, Ga.

Paving.—Board of Awards, Wm. F. Broening, Prest., Baltimore, Md.—Bids until July 19 for following: Resurface with sheet asphalt, North Ave., between Charles St. and Guilford Ave.; Front, between Lexington and Fayette Sts.; repave with asphalt on 6-in. concrete base, Evergreen Terrace between Fulton and Orem Aves.; Guilford Ave., between 23rd and 24th Sts.; Charles St. between 29th and 31st Sts.; Oak St., between 24th and 25th Sts.; plans, etc., on file; A. E. Christliff, Highways Engr., H. G. Perring, Chief Engr.

Paving.—O. F. Holcombe, Mayor, Houston, Tex.—Bids opened July 10 to construct sidewalks on Daly St., from N. Main to Trentem, and Trentem from Daly to N. Main; plans, etc., from J. C. McVey, City Engr.

Paving.—Board of Awards, Wm. F. Broening, Prest., Baltimore, Md.—Bids until July 19 to grade and pave with cement concrete footways (Contracts Nos. 26 and 27); A. E. Christliff, Highways Engr.; H. G. Perring, Chief Engr.

Paving.—F. H. Wharton, City Mgr., Miami, Fla.—Bids until July 18 to pave following: 170,819 sq. yds. bituminous macadam pavement; 24,683 sq. yds. concrete sidewalks; plans, etc., on file and from Chas. W. Murray, Director Public Service.

Paving.—A. G. Munding, City Engr., Baton Rouge, La.—Bids opened July 7 to gravel and construct curb and gutters on Golden Rod Ave., from Government St. to Kleinert Tract; plans, etc., on file.

Pipe.—City of West Palm Beach, Fla., L. G. Biggers, Mayor.—Invite bids on 8 and 12-in. high pressure pipe for fire protection system.

Pipe and Fittings.—Austin Floral Co., 722 Congress Ave., Austin, Tex.—Pipe and fittings for greenhouses; f. o. b. Austin.

Plumbing.—Board of Awards, Richard Gwinn, Register, Baltimore, Md.—Bids until July 19 to install plumbing system in schools Nos. 3, 4, 10, 12, 47, 59, 62, 84, 88, and 113; plans on file at office of J. F. Crowther, Inspector of buildings.

Plumbing Supplies.—Archer Plumbing Co., 2510 Washington Ave., Houston, Tex.—Prices on plumbing supplies.

Printers' Supplies.—See Printing Equipment, etc.

Printing Equipment, etc.—Glades County Democrat & Printing Co., Moore Haven, Fla.—Prices on printers' supplies and printing equipment.

Printing Press.—J. K. Coogler, Brooksville, Fla.—Hooper printing press.

Pumps (Electric and Gasoline).—City of West Palm Beach, L. G. Biggers, Mayor.—Invite bids on 250 H. P. electric driven pump and 300 H. P. gasoline pump for fire protection system.

Radial Drills.—Chas. A. McLean, 516 Citizens Bank Bldg., Norfolk, Va.—Several large radial drills.

Rails.—Mills Contractors Equipment Co., Chattanooga, Tenn.—30 gross tons of 40 lb. relaying rails with splice bars; first-class condition; N. Carolina delivery; give location for inspection.

Refining Equipment (Crude Camphor).—David L. Moss & Co., Importers and Exporters, 60 Wall St., New York City.—Equipment used in process of refining crude camphor; also equipment to mould camphor into blocks and tablets.

Reinforcing Iron.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on reinforcing iron.

Reservoir.—Geo. Goodrich, Mayor, Fayetteville, Tenn.—Bids until July 18 for furnishing materials and constructing reinforced concrete covered circular reservoir, 1,000,000 gal. capacity, approx. 650 cu. yds. concrete; plans and specifications on file.

Road Construction.—Harris County, H. L. Washburn, County Auditor, Houston, Tex.—Bids until July 17 to reconstruct following:

Webster Air Line road.
Washington County road; plans, etc., from County Engrs.

Road Construction.—Gonzales County Commrs. Court, J. C. Romberg, County Judge, Gonzales, Tex.—Bids opened July 12 for 9.27 mi. State Highway No. 29; gravel surface; plans, etc., from Chas. F. Tom, County Engr., Randle Bldg., Gonzales and State Highway Dept., Austin, Tex.

Road Construction.—Milam County, Gles L. Avriett, County Auditor, Cameron, Tex.—Bids until July 25 to improve 17.94 mi. State Highway No. 36; concrete; plans, etc. from A. F. Mitchell, County Engr., and State Highway Dept., Austin, Tex.

Road Construction.—Louisiana Highway Comsn., Raymond Bldg., Baton Rouge, La.—Bids until July 25 for gravel surfacing 17.08 mi. Hammond-Baton Rouge Highway; Sections A and B, Albany to Walker; Livingston Parish; 31,510 cu. yds. sand-clay gravel; or 10,510 cu. yds. washed gravel and 21,000 cu. yds. sand-clay gravel; plans etc. from J. M. Fourmy, State Highway Engr., Baton Rouge.

Road Construction.—Jefferson County, J.

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B. Peek, County Judge, Beaumont, Tex.—Bids opened July 10 to construct road bed embankment across marsh adjacent to Neches River, on Dreyden road; \$95,200 cu. yds.; plans, etc. from A. C. Love, County Engr.

Road Construction.—Campbell County Highway Comms., Jesse L. Rogers, Chrmn., Jacksboro, Tenn.—Bids until July 21 for following roads:

No. 2—12 mi. from Habersham to Titus.
No. 3—3 mi. from Hickory Creek to Pine Mountain; plans, etc., from Ch. Engr., La-Follette, Tenn.

Road Construction.—Walker County Highway Comsn., L. C. Britton, Chrmn., Jasper, Ala.—Bids until July 29 for 3 mi. road from city limits of Dora to Jasper-Birmingham Highway; concrete; plans, etc., on file.

Road Construction.—Palm Beach County Comms., Hector Harris, Chrmn., West Palm Beach, Fla.—Bids until July 15 for following: 6.8 mi. Ocean Blvd., between Delray and Boca Ratone.

1.5 mi. 9-ft. shell road in Section 8, Tp. 47 S. Range 43 East (near Yamato) road; plans, etc., from R. F. Goodman, County Engr.

Road Construction.—Dallas County, Chas. E. Gross, County Auditor, Dallas, Tex.—Bids opened July 10 for 3 mi. Portland cement concrete pavement on Seagoville road from city limits to Dallas eastwardly across White Rock Bottom; plans, etc., from Nagle-Witt-Rollins Engineering Co., Engr., Dallas.

Road Construction.—Karnes County, D. O. Klingeman, County Judge, Karnes City, Tex.—Bids opened July 11 for 14.54 mi. State Highway No. 9, through Road Dist. No. 4; 25,584 cu. yds. caliche surfacing; second course 20,233 cu. yds. gravel surfacing; 146,848 sq. yds. bituminous surface treatment; 150,003 lin. ft. concrete header curb; Federal Aid Project No. 266; O. N. Powell, Highway Engr., Kenedy, Tex.

Road Construction.—State Highway Comsn., Frankfort, Ky.—Bids until July 19 for following State Projects improvements:

No. 5, Section K—Madison County, 4.67 mi. Richmond-Winchester road; from Kentucky River to Sta. 246 plus 57; bituminous surface treatment; 8000 gals. medium oil or tar; 250 tons stone chips or pea gravel.

No. 29, Section A—Madison County, 5 mi. Richmond-Irvine road, from Station O plus 00 to Station 264; bituminous surface treatment; 14,000 gals. medium oil or tar; 400 tons pea gravel or stone chips.

No. 44, Section D—Anderson County, 4.07 mi. Bloomfield road from city limits of Lawrenceburg to McBriar road; bituminous surface treatment; 8000 gals. medium oil or tar; 240 tons pea gravel or stone chips.

No. 26, Section B—Woodford County, 4 mi. Versailles-Harrodsgrove road, from city limits of Versailles to 4 mi. south in Woodford County; bituminous surface treatment; 8000 gals. medium oil or tar; 240 tons stone chips or pea gravel.

No. 32, Section B—Montgomery County, 7.64 mi. Paris-Mt. Sterling road, from Bourbon County line to Mt. Sterling-Sharpsburg road; bituminous surface treatment; 16,000 gals. medium oil or tar; 450 tons stone chips or pea gravel.

No. 29 Section B—Estill County, 3.57 mi. Irvine-Richmond road from West Irvine to Station 187 plus 80; bituminous treatment; 10,000 gals. medium oil or tar; 290 tons pea gravel or stone chips; plans, etc., from Joe S. Boggs, State Highway Engr.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until July 13 for State road from Carthage northeastward; 18-ft. wide; one course concrete pavement; grade and construct culverts; Jasper County Project No. 188-A.

Road Construction.—Pitt County Highway Comsn., W. H. Dail, Jr., Chrmn., Greenville, N. C.—Bids until July 31 for following:

5 mi. road between Greenville and Falkland.
7 mi. road between Greenville and Cox Mill; both concrete; plans, etc., on file; J. B. Harding, County Engr.

Road Construction.—State Highway Dept., Montgomery, Ala.—Bids until July 25 for 18.754 mi. road from Guin to Walker County line, via Winfield; 50,000 cu. yds. gravel surfacing; plans, etc., from W. S. Keller, State Highway Engr., Montgomery, or Div. Engr., Decatur, Ala.

Road Construction.—State Highway Dept., Montgomery, Ala.—Bids until July 19 for 3.48 mi. Hefflin-Anniston rd, Cleburne County; 6343 cu. yds. imported chert; plans, etc., from W. S. Keller, State Highway Engr., or Div. Engr., Birmingham, Ala.

Road Construction.—Bailey County Comms., Court, R. J. Klump, County Judge, Muleshoe, Tex.—Bids until July 15 for road improvement in Road Dist. No. 1; \$40,000; C. L. Hasie, Engr. in charge.

Road Construction.—Pitt County Highway Comsn., J. B. Harding, Engr., Greenville, N. C.—Bids until July 31 for following:

5 mi. 16-ft. Highway between Greenville and Falkland.
7 mi. 16-ft. highway between Greenville and Cox Mill; both concrete; plans, etc. on file.

Road Construction.—Louisiana Highway Comsn., Raymond Bldg., Baton Rouge, La.—Bids until July 25 to gravel surface 9.17 mi. Greensburg-Fisher Highway, Sections A and B; St. Helena and Tangipahoa parishes. Project No. 362; plans, etc on file; J. M. Fourmy, State Highway Engr.

Road Construction.—North Carolina State Highway Comsn., Raleigh, N. C.—Bids until July 26 for following projects:

131—Gates-Hertford Counties, 15.95 mi. soil road from Winton to Gatesville.
132—Gates County, 10.9 mi. soil road from Gatesville to Sunbury.

173—Pasquotank County, 7.0 mi. hard surface road from Elizabeth City to Perquimans County line.

183A—Pitt County, 13.54 mi. hard surface road from Greenville to Bethel.

236—Johnston County, 15.5 hard surface road from Wake County line to Smithfield.

342—Cumberland County, 6.0 mi. hard surface road from Fayetteville to Hope Mills.

484—Wake County, 9.3 mi. hard surface road from Raleigh to Neuse River.

494—Warren County, 6.7 mi. hard surface road from Norlina to Vance County line.

535—Guilford County, 7.8 mi. hard surface road from Greensboro to Reedy Fork Bridge.

580—Moore County, 18.5 mi. soil road from Aberdeen to Lee County line.

602—Alexander County, 9.3 mi. penetration macadam road from Taylorsville to Iredell County line.

640—Iredell County, 8.0 mi. penetration macadam road from Alexander County line to Hickory road.

702—Allegheny County, 15.1 mi. soil road from Asha County line to Sparta.

764—Surry County, 2.0 mi. hard surface road near Pilot Mountain.

814—Burke County, 8.1 mi. soil road from Morganton to Caldwell County line.

821—Cleveland County, 1.5 mi. hard surface road from Gaston County line to Kings Mountain.

847—McDowell County, 4.0 mi. road from

Avery County line to Ed. English's place.

888—Yancey County, 15.22 mi. gravel and macadam road from Swiss to Mitchell County line.

952—Jackson County, 1.6 mi. soil road from Forks to Tuckaseegee River to Glenville.

963—Macon County, 8.0 mi. soil road from Franklin to Jackson County line.

Road Construction.—Mobile County Board of Revenue and Road Comms., Jno. D. Hagana Prest., Mobile, Ala.—Bids until Aug. 1 for following:

4.73 mi. clay gravel road from intersection Grand Bay-Union Church road at Dee's Store to Dawes; 5550 cu. yds. clay gravel.

2.82 mi. clay gravel road from Insane Asylum to Alabama River, via Mount Vernon; 3808 cu. yds. clay gravel; plans, etc., from L. E. Prouty, County Highway Engr.

Rolling Partitions.—Rev. E. O. Whitwell, Pastor, Presbyterian Church, Ala., Okla.—Rolling partitions for church.

Sand and Gravel.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on about 20 cars sand and about 40 cars of gravel or crushed stone.

School Equipment.—School Trustees, Mrs. Andrew J. Howell, Secy., Whiteville, N. C.—Bids until July 31 for 400 single desks, 300 auditorium seats, 15 teachers' desks and chairs, shades for building, equipment for domestic science, general science and agricultural departments, automatic timing system, etc.

Seating.—School Trustees, Mrs. Andrew J. Howell, Secy., Whiteville, N. C.—Bids until July 31 for 400 single desks, 300 auditorium seats and 15 teachers desks and chairs. (See School Equipment.)

Screw Machine.—Sumter Radio Mfg. Co., (Mchy Dealers) 103 S. Harvin St., Sumter, S. C.—Good used screw machine, same as B. & S. No. 2, wire feed; could use one capacity of B. & S. No. 1.

Sewer Castings.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on sewer castings, manhole frames and covers.

Sewer Construction.—Treasury Dept., Jas. A. Wetmore, Acting Supvg. Archt., Washington, D. C.—Bids until July 24 to construct sanitary sewer, etc., at U. S. P. O. and Custom House, New Orleans, La.—Plans on file at office of Custodian, Eagle Pass.

Sewer Construction.—City, Sewer Improvement Dist. No. 3, E. E. Barlow, Prest., Dermott, Ark.—Bids until July 14 for sewer construction; 83 drop connections; 57 manholes; 22 flush manholes, etc.; 27,635 lin. ft. 8 to 15-in. pipe; plans, etc., from Ford & McCrea, Consult. Engrs., 215 Gazette Bldg., Little Rock, Ark.

Sewer Construction.—W. R. Scott, Mayor, Kingstree, S. C.—Bids until July 21 to extend and enlarge sewerage system; about 2 mi. pipe sewers, 6-in. to 8-in. in diam. and appurtenances; plans and specifications on file at office of Mayor and office of P. G. Gourdin, Engr.

Sewer Construction.—City, F. H. Wharton, Miami, Fla., Mgr.—Bids until July 18 to construct following sewer work, divided into 3 contracts; furnishing and laying approx. 65,000 ft. of 8-in. pipe, 4000 ft. of 10-in. pipe; 3000 ft. of 12-in. pipe, 1500 ft. of 15-in. pipe; with necessary manholes and flush tank; plans, etc., on file at office of City Mgr. or at office of Chas. W. Murray, Director of Public Service.

Sewer Pipe.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on terra cotta sewer pipe 4-in. to 12-in., inci.

Sewing Machines.—Jenkins Mfg. Co., Box 1717, Ft. Worth, Tex.—Sewing machines of all kinds, will purchase from firms having discontinued or have surplus on hand.

Silos.—Board of Awards, Richard Gwinn,

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City Register, Baltimore, Md.—Bids until July 12 for 2 silos at Bay View; J. F. Crowther, Inspector of Buildings.

Steel Boat Hull.—U. S. Engr. Office, Pittsburg, Pa.—Bids until July 19 to furnish and deliver one steel derrick boat hull; further information on application.

Steel Ladder, etc.—U. S. Engr. Office, 329 Custom House, New Orleans, La.—Bids until July 17 to construct and deliver steel ladder, pipe, gears and shafting for U. S. dredge Gulfport; further information on application.

Steel Tanks.—Capital Builders Supply Co., Washington, D. C.—Two steel tanks, capacity 25 or 30 ton.

Stone.—Rev. E. O. Whitwell, Pastor, Presbyterian Church, Ada, Okla.—Stone for church, 62x108 ft.

Stoves.—C. O. Smith, Halehurst, Ga.—Stoves for schools at Toombsboro and Reidsville, Ga.

Tallow.—Kendall products corp., 211 Vernon Ave., Long Island City, L. I.—Tallow under 20% in F. F. A. and not too dark in color.

Tank and Tower, etc.—City of Ridgely, Tenn.—W. S. Alexander, Mayor.—Bids opened July 12 for one steel tank and tower, water mains, valves, fire hydrants and installation; Thomas H. Allen, Const. Engr., 510 Bank of Commerce Bldg., Memphis, Tenn.

Tank, Tower and Pumping Machinery.—Noland-Clifford Co., Inc., Newport News, Va.—Invites bids on tank and tower and pumping machinery.

Tank (Water).—U. S. Mausoleum Co., 310 Bond Bldg., Washington, D. C.—Invite bids on 5000 to 7000 gal. automatic pressure water tank.

Threading Machine.—U. S. Machine Shop, Box 424, Electra, Tex.—Prices on No. 734 Little Giant bolt threading machine.

Tin License Tags.—Board of Awards, Richard Gwinn, City Register, Baltimore, Md.—Bids until July 12 to furnish collector of water rents and licenses with 36,800 stamped tin license plates and 40,000 German silver dog license tags and 3800 vander badges; further information on application to Daniel J. Loden, Collector of Water Rents and License.

Tires.—Earle Wright Motor Co., Okmulgee, Okla.—Prices on tires.

Transformers.—Pennsylvania Equipment Co., Norwood, Pa.—To purchase following transformers: 400 KVA., 25 cycle, oil cooled, single phase, out-door type, 33,000 to 16,500 volts, and four 1000 KVA., 15 cycle, oil cooled, single phase, in-door type, 33,000 volts to 385,000; second-hand.

Trenching Machine.—Noland-Clifford Co., Inc., Newport News, Va.—Trenching machine to excavate pipe trenches.

Tube Mill (Krupp).—Security Cement & Lime Co., Hagerstown, Md.—Second-hand 6x22 or 6x20 Krupp tube mill with steel heads.

Upsetting Machine.—Chas. A. McLean, 516 Citizens Bank Bldg., Norfolk, Va.—Upsetting machine, capacity 3-in. or more.

Veneer Machine.—E. E. Martin, Mt. Olive, N. C.—To purchase 60 to 70-in. veneer machine, second-hand.

Washing Machines.—J. A. Hockaday, Angier, N. C.—To correspond with mfrs. of washing machines of one, two or three compartments, for laundry.

Water Works.—City, R. N. Cantwell, Commissioner Public Works, Wilmington, N. C.—Bids until July 18 to construct water works additions and extend water intake line about 2 mi.; lay 650-ft. 24-in. cast iron ball and socket pipe under Cape Fear River;

also 10,350 ft. 42-in. wood, cast iron or concrete pipe below water level to Toomers Creek; plans, etc., from Carolina Engineering Co., Engr., 412 Southern Bldg.

Water Works.—Fred E. King, Mayor, Vero, Fla.—Bids opened July 12 to construct water works system; 14,270 ft. 6 to 10-in. cast iron pipe; 37 fire hydrants; 8 gate valves; 75,000 gal. steel tank, on 108-ft. tower; concrete foundations; 500 to 750 G. P. M. capacity motor driven centrifugal service and fire pumps; 12,500 gal. per hour capacity reinforced concrete lime-soda softener, etc.; plans, etc., from Carter & Damerow, City Engrs.

Wharf and Shed Foundations.—City Comrs., A. W. D. Hall, Mgr., Tampa, Fla.—Bids until July 26 to furnish materials, labor and equipment necessary to construct reinforced concrete wharf and transit shed foundation at municipal slip and Estuary; 2288 lin. ft. wood sheet pile bulkhead, 879 wood piles for retaining wall and pedestal foundation, 102,614 B. M. ft. lumber for bulkhead caps, valves and flooring, 2186 cu. yds. concrete for bulkhead, retaining wall and foundation pedestals, 19,526 ft. concrete platform piles, 1476 ft. straight concrete platform, 30 ft. wide with railroad track, 695 ft. straight concrete platform without railroad track, 3848 sq. ft. concrete platform other than straight work, 15,000 cu. yds. rock fill, 40,000 cu. yds. earth fill and 84 lin. ft. sewer outlet 36-in. cast iron pipe; plans on file; R. D. Martin, City Engr.

White Enamel Iron.—P. M. Busick, Prest., Dill Pickle Tea Room, Greenville, S. C.—Prices on white enamel iron.

Windows (Cathedral).—U. S. Mausoleum Co., 310 Bond Bldg., Washington, D. C.—Invite bids on cathedral windows.

Wire Mesh and Machine Bolts.—Mississippi River Comsn., 1st and 2nd Dists., Customhouse, Memphis, Tenn.—Bids until July 25 to furnish and deliver wire mesh and machine bolts; further information on application.

Wood-working Equipment.—Poteau Mfg. Co., Room 8, Patrick Bldg., Poteau, Okla.—To purchase complete wood-working equipment for mfrs. of stool chairs, porch swings, folding chairs, etc.

Financial News

New Financial Corporations.

Ala., Birmingham—Metropolitan Mortgage Company, inctpd. by W. B. Hillhouse, James D. Hillhouse, Hugh Hillhouse and R. H. McIntosh.

Ala., East Florence—Bank of East Florence, capital \$50,000, inctpd. with Thos. J. Phillips, Prest., R. E. Weatherly, V.-P., H. C. McGee, Secy., and others.

Fla., Gainesville—Paving, Light and Water—Drayton Avera, Secy., Board of Public Works, sold \$125,000 6% street and \$30,000 6% water and light bonds to G. B. Sawyers Co. Jacksonville, for \$162,440 and accrued interest.

Fla., Groveland—School—Groveland School Dist. voted \$16,500 bonds.

Fla., Groveland—School—Election to be held July 17 for \$7000 bonds for building at Howey.

Fla., Jacksonville—Jacksonville Investment Corp., capital \$10,000, inctpd. by A. C., A. M. and M. E. Hutto.

Fla., Miami—Commercial Mortgage Co.,

capital \$50,000, inctpd. by I. E. Schilling, M. E. Schilling and L. E. Ross.

Fla., Miami—Willoughby Bond & Mortgage Co., capital \$50,000, inctpd. by Chas. G. Willoughby, Theo. G. Houser and Dais H. Galbreath.

Fla., St. Petersburg—Hackney Audit Co., capital \$10,000, inctpd. by Jas. H. Hackney, L. B. Mundell and C. D. Coleman.

Fla., Stuart—Florida Growers Guaranty Finance Corp., capital \$50,000, inctpd. by Carroll Dunscombe, W. H. Aspinwall and S. W. Sparks.

Ga., Marietta—The Citizens' Nat. Bank, capital \$100,000, surplus \$10,000, inctpd. with M. L. McNeel, Prest., J. R. Fowler and James T. Anderson, Vice-Prests., J. D. Corn, Cashier, and others.

Ga., Savannah—Citizens & Southern Co., capital \$2,000,000; inctpd. with Mills B. Lane, Prest., G. L. Grover, William Murphy and others. (Lately noted.)

Md., Baltimore—Warren Sales Corp., Equitable Bldg., inctpd. by Wm. P. Whitaker, Henry M. White and Mary O. Gordon.

Miss., Clarksdale—Planters National Bank, capital \$500,000, surplus \$50,000, inctpd. with W. P. Holland, Prest., E. L. Anderson, Vice-Prest., and Oscar Johnson, Chrmn. of board.

Mo., Kansas City—City Bureau of Investigation, capital \$10,000, inctpd. by John Burroughs, W. E. Orndorff and D. M. Tree.

Mo., Kansas City—Guaranty Investment Co., capital \$25,000, inctpd. by C. R. Burrell, W. K. Bramwell and H. C. Honan.

Mo., Kansas City—Old Westport Investment Co., capital \$50,000, inctpd. by O. H. McQuary, Jr., H. R. Mills, and A. G. McQuary.

Mo., Kansas City—Frederick A. Eysell Estate, Inc., capital \$210,000, inctpd. by Helen A., Henry O., and E. E. Eysell.

Mo., St. Louis—Conservative Investment Co., capital \$17,700, inctpd. by W. T. Page, Dan'l Graef, L. J. Schneider and others.

Mo., St. Louis—Robert C. Schapler First Mortgage Co., capital \$50,000, inctpd. with Robert C. Schapler, Prest., E. E. Prettyman, Vice-Prest., and E. E. Schapler, Secy., 211 N. 7th St.

Mo., St. Louis—The Motors Investment Company, capital \$50,000, inctpd. by F. A. Groves, J. D. Manley, H. J. Stewart and others.

Mo., St. Louis—South Broadway Loan Association, capital \$10,000, inctpd., W. S. Cohen, Sam Saiger, A. Singer and Ben Reiss.

Mo., St. Louis—Robert C. Schapler First Mortgage Co., capital \$5000, inctpd. by R. C. Schapler, J. H. Farrell, and others.

Mo., St. Louis—Square Deal Loan Association, capital \$10,000, inctpd. by Ely Becker, Rose Bernack, and others.

Mo., Springfield—Burton Bldg. & Loan Association, capital \$1,000,000, inctpd. by W. G. Burton, W. H. Barton, H. T. Lincoln, and others.

N. C., Burlington—Central Home Building Asso., capital \$70,000, inctpd. with R. H. Whitehead, Prest., W. R. Freshwater, Vice-Prest., W. W. Brown, Secy. and Treas.

N. C., Shelby—Cleveland Building and Loan Assn., inctpd. with William Lineberger, Prest., and J. J. Lattimore, Secy.

Okla., Canute—The First State Bank, capital \$20,000, inctpd. by H. H., T. A., and Fred T. Lamm.

Okla., Morrison—Citizens' State Bank, capital \$15,000, inctpd. by A. Cunningham, J. L. Liggitt and Fred Schroeder.

Okla., Tulsa—Tulsa Investment Company, capital \$10,000, inctpd. by Geo. C. Frickel, O. L. Stewart and F. B. Stewart.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



The whole story of Caterpillar Tires in fifty-five words

We quote below a letter from the Southwestern Milling Co. of Kansas City, Mo., two of whose trucks are pictured above.

This letter contains only fifty-five words but a whole volume could not have told more completely the story of Caterpillar tires.

"We have adopted Kelly-Springfield Caterpillars on our trucks for the Kansas City Branch because of their special adaptability to our conditions.

"They eliminate the use of chains, give more traction especially on steep hills, give more cushion or spring to the trucks and wear more miles than any tire we are able to buy."

This story is not new to us. We hear it every day from truck owners who, like this firm, have learned from actual experience what Caterpillars will do.

Better traction, better cushioning for the truck and greater mileage—there is only one more thing you can ask of any tire and that is lower cost. Caterpillars will also give you that. Their first cost is less than pneumatics and their exceptional mileage makes their final cost less than ordinary solids.

No truck owner who appreciates the value of efficient and economical operation of his trucks will ignore a tire with such a combination of qualities as Caterpillars offer. Have you got acquainted with them yet?

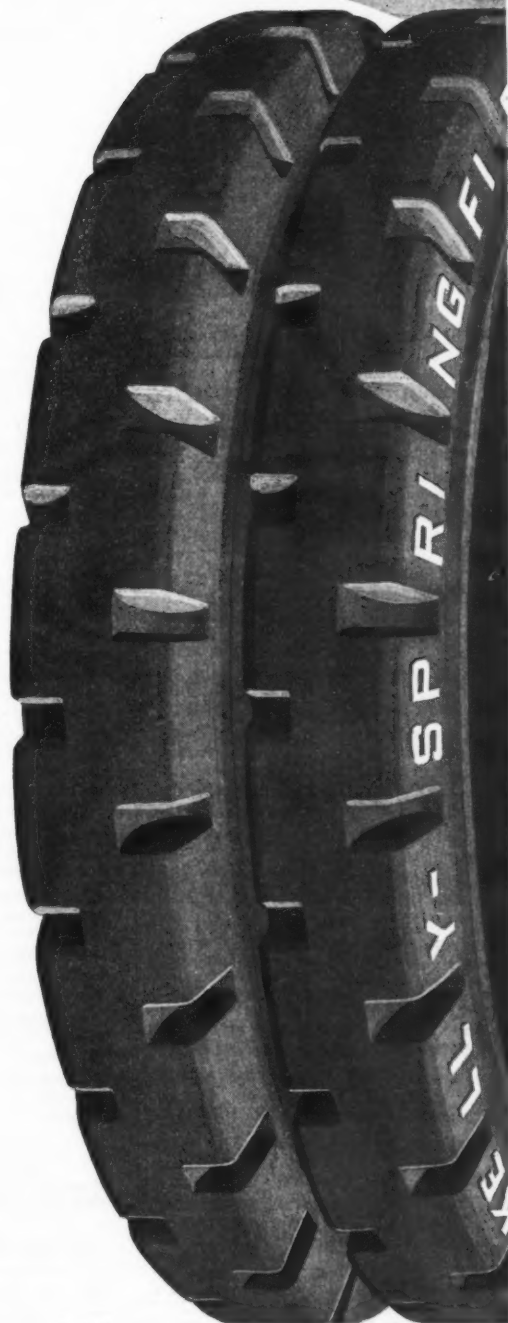
*Caterpillars are made in sizes suitable for trucks
of every type and weight*

Kelly-Springfield Tire Co.

GENERAL SALES DEPARTMENT

250 West 57th Street

NEW YORK



S. C., Sumter—The Sumter Trust Co., capital \$100,000, surplus \$55,000; inceptd. with I. C. Strauss, Prest., R. O. Purdy, V.-P., R. L. Edmunds, Secy., and others.

Tex., Gary—Panola Co., Guaranty State Bank, capital \$12,500, inceptd. with Z. L. Daniel, Prest., W. M. Byrn, V.-P., J. S. Du Boso, Cashier, and others.

Tex., San Antonio—Travis Investment Co., capital \$250,000, inceptd. by R. C. Hill, P. H. Rogers, and Wallace Rogers.

Va., Blacksburg—Bank of Blacksburg applied to convert to National Bank of Blacksburg.

Va., Bristol—Bristol Savings and Loan Co., capital \$50,000, inceptd. with W. H. Gibson, Prest.

Va., Charlottesville—Virginian Assn. of Mutual Insurance Companies, inceptd. with Wm. R. Duke, Prest.; Geo. B. Keezell, Keezelton, V.-P., and Janet Whitlock, Secy.-Treas.

Va., Richmond—Grace Street Bank & Trust Co., capital \$500,000, inceptd. with T. Elwood Tragle, Prest., Geo. B. Snead, Secy., Edgar Allan, Jr., and others.

Va., Richmond—Mutual Casualty Assn., paid up premiums \$50,000 inceptd. with S. M. Bemiss, Prest., A. S. Mawse, Vice-Prest.

New Securities.

Ala., Andalusia—School and Funding—City sold \$55,000 6% school and \$12,500 6% funding bonds, \$500 denomination to J. L. Arlitt, Austin, for 100 and interest.

Ala., Gadsden—Improvement—City, H. C. Thomas, Clk., receives bids until July 10, for \$80,000 6% bonds. (Lately noted.)

Ala., Scottsboro—School—J. D. Snodgrass, Mayor, receives bids July 18, for \$25,000 5%, \$500 denomination bonds.

Ala., Tuscaloosa—School—Board of City Commrs., D. B. Robertson, Prest., receives bids until July 18, for \$35,000 5% bonds; \$1000 denomination.

Ark., Blytheville—Improvement—Arkansas-Missouri Power Co., will issue \$652,000 bonds.

Ark., El Dorado—Paving—City sold \$30,000 6% bonds to M. W. Elkins & Co., Little Rock. Address The Mayor.

Ark., Texarkana—Road and Bridge—City voted \$65,000 bonds; W. A. McCartney, Chrmn. of Comm.

Fla., Bradentown—School—Palmetto Spec. Tax School Dist. No. 33, sold \$35,000 6% bonds to Hanchett Bond Co., Chicago, at 104.38.

Fla., Bushnell—Paving—City sold \$10,000 6% bonds, \$1000 denomination, to J. L. Arlitt, Austin, on 6½% basis.

Fla., Clearwater—Road—Pinellas County Commrs., vote Aug. 15 on \$2,697,000 bonds.

Fla., Jupiter—Road and Bridge—County Commrs. sold \$80,000 bonds to The Farmers Bank and Trust Co., for \$78,000 and accrued interest. (Lately noted.)

Fla., Miami—Improvement—City Comsn., receives bids until July 18, for \$695,000 5½% bonds.

Fla., Miami Beach—Sewer—City votes July 25 on \$125,000 bonds; \$1000 denomination; C. W. Tomlinson, City Clk.

Fla., Orlando—Water and Light—City Clk., J. C. Bernard receives bids until July 18 for \$975,000 5½% bonds.

Fla., Sanford—Street, sewer, etc.—City sold \$325,000 6% bonds to Spitzer, Rorick &

Co., Toledo and Marks & Co., Birmingham at \$1631 premium. Address The Mayor. (Lately noted.)

Fla., Sanford—Street—Seminole County Commrs. sold \$100,000 bonds to Marks & Co., Birmingham, at \$1131 premium.

Fla., Tallahassee—Paving-Sewers—B. H. Bridges, City Clk., plans voting on \$125,000 street paving and \$20,000 sewer bonds.

Fla., West Palm Beach—School—Palm Beach County Board of Public Instruction, Agnes Ballard, Supt., sold \$60,000 6% bonds, to Blanchert, Thornberg & Vandersall, Toledo, O., for par and accrued interest plus \$820 premium. (Lately noted.)

Fla., Winter Garden—Improvement—City sold \$70,000 6% bonds to First National Bank at premium of \$162 and accrued interest.

Ga., Buchanan—Road—Haralson County, G. F. Dodson, Clk., receives bids until July 18, on \$200,000 6% bonds, \$1000 denomination.

Ga., Butler—School—Butler High School District will sell \$20,000 bonds, recently noted.

Ga., Owensboro, P. O. Rochelle—School—C. E. Richey, Secy., voted \$12,000 bonds.

Ga., Rochelle—School—R. O. Holton, Chairman Rochelle Consolidated Schools, voted \$60,000 bonds.

Ga., Savannah—Road and Bridge—Chatham County, G. Reuben Butler, Clk., receives bids until July 25, for \$500,000 4½% bonds. (Lately noted.)

Ky., Greenup—Road and Bridge—Greenup County voted \$200,000 bonds. Address County Commrs.

Ky., Louisville—Road—Jefferson County, Chas. A. McCulloch, Treas. receives bids until July 29 for \$35,040 5% bonds.

La., Bastrop—School—Parish School Bd., S. A. Caldwell, Secy., receives bids until July 11, for \$18,000 6% bonds; \$1000 denomination.

La., Minden—Refunding—Town, W. O. Ashby, Clk., sold \$140,000 6% bonds to Sutherland, Barry & Co., Inc., New York, at \$5075 premium.

La., Minden—Refunding—Town, W. O. Ashby, Clk., sold \$140,000 6% bonds to Sutherlin, Barry & Co., New Orleans, at par plus 3½%.

La., Natchitoches—School—City sold \$35,000 5% bonds to M. W. Elkins & Co., Little Rock, Ark.

La., Tallulah—Levee—F. H. Schneider, Prest., Board of Commrs., receives bids until July 12, for \$100,000 5% bonds; \$1000 denomination.

Md., Chestertown—Road—Kent County Commrs. sold \$21,000 5% bonds to Third National Bank, at 102.

Md., Hagerstown—Sewer—City, C. E. Bowman, Mayor, receives bids until July 18, for \$300,000 5% bonds; \$1000 denomination. (Lately noted.)

Miss., Fayette—Road—City voted \$50,000 bonds. Address The Mayor.

Miss., Magnolia—School—City sold \$10,000 bonds to Magnolia Bank, for par and accrued interest. (Lately noted.)

Mo., Branson—Water Works and Sewer—City votes July 18 on \$32,000 water-works and \$6000 sewer bonds. Address The Mayor.

Mo., Carrollton—Road—Carroll County Court votes July 29 on \$125,000 bonds.

Mo., Caruthersville—School—New Survey School District voted \$8000 bonds. Address The Trustees.

Mo., Monett—Park—City sold \$25,000 bonds to Guarantee Trust Co., Kansas City.

Mo., St. Charles—School—St. Charles

School District voted issues of \$24,000 and \$200,000 bonds. Address Trustees.

N. C., Durham—Improvement—City, R. W. Rigsby, Mgr., sold to a syndicate composed of Kaufman-Smith-Emert & Co., Inc., St. Louis; Detroit Trust Co., Detroit; Taylor, Ewart & Co., Chicago, and A. B. Leach & Co., Inc., N. Y., \$300,000 Street, \$150,000 water, \$75,000 funding, and \$70,000 cemetery bonds; at par plus a premium of \$3997.50.

N. C., Kernersville—Water and Sewer—Town, O. L. Joyner, Secy., sold \$105,000 6% bonds to Prudden & Co., Toledo, at \$1057 premium.

N. C., Morgantown—Water—Town, O. R. Lackey, Mgr., sold \$250,000 6% bonds to Provident Savings Bank & Trust Co., Cincinnati, at 104.04.

N. C., Raleigh—Water—City, W. L. Dowell, Clk., receives bids until July 12, on \$388,000 6% bonds; \$1000 denomination. Lately noted.)

N. C., Raleigh—Water—T. B. Eldridge, Commr. of Public Accounts and Finance receives bids until July 12, for \$388,000 6% bonds; \$1000 denomination.

N. C., Raleigh—Water—City Commrs. will sell \$388,000 bonds; \$1000 denomination.

N. C., Sanford—Refunding—Lee County Commrs., J. J. Edwards, Chrmn., will receive bids July 10, for \$50,000 5% bonds.

N. C., Wilmington—Street—City Commra. will sell \$350,000 bonds.

N. C., Wilmington—Street and Water Works—City will sell about Aug. 15, \$200,000 6% street and \$200,000 to \$250,000 6% water works bonds; \$1000 denomination; J. E. Thompson, Commr. of Finance.

S. C., Blackstock—School—City voted \$12,000 bonds. Address The Mayor.

S. C., Florence—Road—City, P. H. Arrow-smith, Atty. sold \$700,000 bonds to Hanchett and Co., Chicago, at 98.

S. C., Gaffney—School—W. C. McArthur, Supt. of Education, sold \$16,500 bonds to J. H. Hillsman & Co., Atlanta, at par.

S. C., Lake City—School—City sold \$65,000 6% bonds to Sidney Spitzer, Toledo, O. at \$2950 premium.

Tenn., Cowan—Municipal—Town, J. R. Greene, Mayor, receives bids until July 14, for \$20,000 6% bonds.

Tex., Alvarado—Paving—City voted \$10,000 bonds. Address The Mayor.

Tenn., Greenville—Water and Sewer—City votes Aug. 12 on \$125,000 bond issue. Address The Mayor.

Tex., Alpine—Road—Brewster County plans issuing \$300,000 bonds; D. E. H. Manigault, State Highway Engr., Attn.

Tex., Austin—School—Bexar County Common School District No. 48, Attorney General approved \$10,000 6% bonds and Anahuac Independent School District \$15,000 6% bonds.

Tex., Austin—Water—City Commrs. contemplates election on \$300,000 bonds.

Tex., Breckenridge—Street—Atty. General, Austin, approved \$330,000 bond issue. Address The Mayor.

Tex., Brownwood—School—City sold \$24,000 5% bonds; \$1000 denomination, to J. L. Arlitt, Austin, for par and interest.

Tex., Colorado—School—City voted bonds. Address The Mayor.

Tex., Denison—Improvement—City votes July 26 on \$65,000 street, \$50,000 school, \$50,000 water and \$10,000 sewer bonds. Address The Mayor.

Tex., Galveston—Street and Water—City, Chas. A. Keenan, Mayor, votes July 29, on bonds.

Tex., Georgetown—School—City voted \$100,000 bonds. Address J. T. Dimmitt, Mayor.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

A prominent engineer writes:
 "Your 'Maintenance Manual' is the most constructive piece of road literature that has come to my attention in years. Congratulations."

TARVIA RESURFACING

By resurfacing the construction of a wearing course over an old road or pavement. The old material serves as a foundation for the new top and a great saving is thereby effected. There are thousands of miles of old macadam, concrete and other types that can be salvaged by resurfacing with Tarvia.

TARVIA-X CONSTRUCTION

1. In the case of old macadam or gravel roads, it may be necessary to earth to a depth of 1" and roll to an even surface. With most pavements it is sufficient to patch holes and ruts with stone and Tarvia. (See page 46).

2. Spread a 3" layer of 1 1/2" clean, tough, hard stone.

3. Roll with a heavy roller to a true and even surface.

4. Apply "Tarvia-X" at the rate of 1.7 gallons per square yard.

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ROAD authorities know that eternal maintenance is the price of good roads; that haphazard patching and treating of highways is more costly in the long run than a system of regular upkeep.

This manual shows how every type of road and pavement, except earth roads, can be easily repaired and maintained with Tarvia.

Whether or not you use Tarvia, this booklet will prove of great benefit to you in your work. "Road Maintenance with Tarvia" is recognized by engineers and road authorities as the most complete and helpful booklet on road maintenance that has ever been published.

A copy will be gladly sent free on request to our nearest branch office. As the number of copies is limited, we suggest that you write for your copy today.

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Good municipal bonds issued by cities, towns, counties
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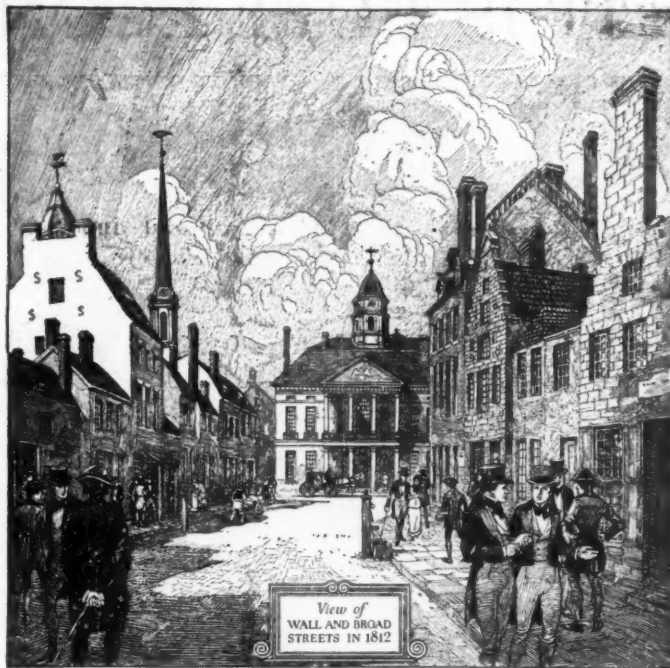
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A Financial Background —of 110 Years

IN the early summer of 1812—110 years ago—the City Bank was granted its charter by the State of New York and began its business career at 52 Wall Street, across the street from its present head office.

It was with this background of more than a century of financial experience, and backed by the resources of what had developed into the largest financial institution in the Western Hemisphere,

that the National City Company was established.

Today, the Company, with its chain of American and Canadian offices and its staff of field representatives in daily touch with Wall Street through 10,000 miles of private wires, brings to the bankers, institutions and individual investors throughout the continent a quality of investment service that carries with it many definite advantages.

The National City Company

National City Bank Building, New York

BONDS

SHORT TERM NOTES

ACCEPTANCES



Now~IT IS FUEL ECONOMY



VIII

MANY firms who operate power plants—even of small size—or who use steam for a heating system or for special processes could make themselves a gift of thousands of dollars a year by practical changes in the operation of their boiler and power plants which would involve but minor additions to their equipment.

It is no theory, but a substantial fact, that the power plant owner pays for the fuel and power saving equipment he does not have—pays for it in higher production costs, in fuel, in labor, in maintenance and in a myriad of other outlays that sap his profits.

The use of a number of boiler room accessories of simple character can effect economies of substantial magnitude that will increase the net revenue.

There are ways to measure the output of the power plant against its cost of operation. Not by a host of intricate formulae and delicate instruments, but by practical means understandable to layman or financial executive as well as to the engineer.

In "The Boiler Room and the Bank Balance" we have gone further in the description of power plant problems. If you would like to see this book and learn how economies have been obtained by McClave Combustion Systems in thousands of successful plants, write for a copy.



McCLAVE-BROOKS COMPANY

Makers of the famous McClave Grates Since 1883

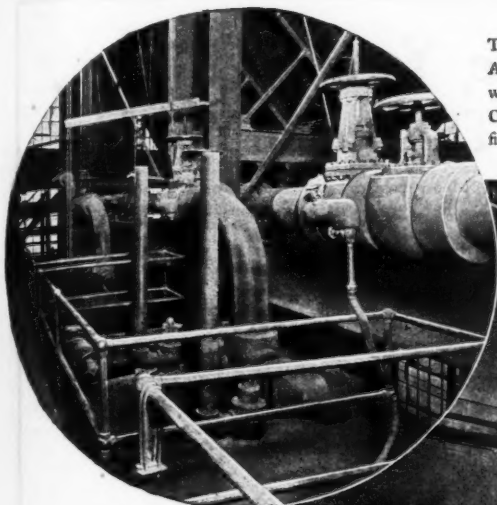
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Your engineer will confirm these statements.

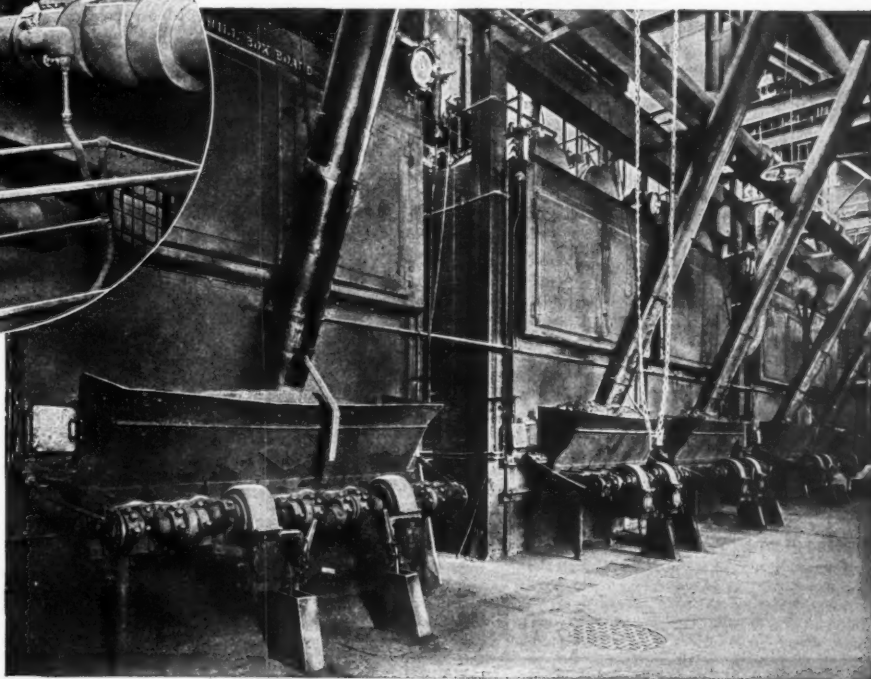
McClave COMBUSTION SYSTEMS *for greater economy*



Top view of boiler and steam connections. Automatic valves admit steam to the main line when it builds up above a predetermined pressure. Conversely, when the pressure falls due to banked fires, the valves cut off the boiler.



Five 518-b.hp. HEINE H-Type Boilers operating at 125 pounds steam pressure, furnish power, heat and steam for processing. Pulverized bituminous coal is fed to Riley under-feed stokers.



Another modern plant installs HEINE Boilers

THE Haverhill plant of the Robert Gair Company, where paper and box-wood are made, uses steam for power and heating.

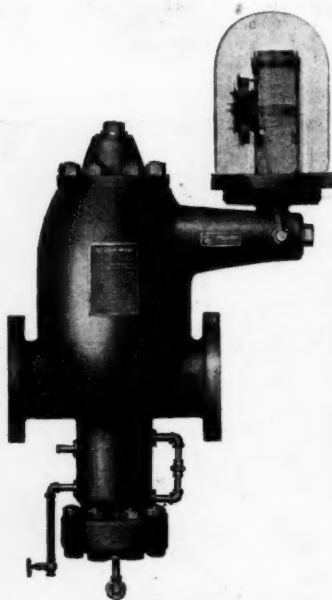
Five 518-b.hp. HEINE H-Type Boilers have been operating there for five years and in a satisfactory manner. The three top and three bottom rows of tubes are washed every five weeks and all tubes twice a year. This has been found to be good practice and the tubes are in excellent condition.

Clean heating surface means long boiler life and better fuel economy. How often to clean a boiler depends upon local conditions of fuel and water.

HEINE Advantages

A feature of HEINE H-Type construction is the convenience of cleaning. Soot and dust are blown from tubes by a series of steam nozzles provided with every boiler. A number of tubes can be washed out by the removal of only one hand-hold plate. Ability to clean from the ends characterizes HEINE H-Type installations. It is possible to erect a solid bank of boilers without alleys between them. HEINE Boilers are the natural choice for industries seeking performance with economy.

Heine Boiler Company
SAINT LOUIS, U.S.A.



St. John Steam Flow Meter (Indicating and Recording) connects directly into the steam line. All steam flows through the meter.

Be Sure You're Right Measure The Steam You Use

The St. John Steam Flow Meter measures the quantity of steam used by engines, pumps, blowers, heating systems, drying rooms and for other purposes.

It is of great value in mills and manufacturing plants to allocate power charges correctly among departments in figuring costs.

It is largely used also by the purchaser or the seller of steam to determine the amount delivered.

It measures the flow of either saturated or superheated steam at pressure above ten pounds and under steady or varying loads; chart shows a complete continuous record of the steam used.

Write for Bulletin No. 146-MR.

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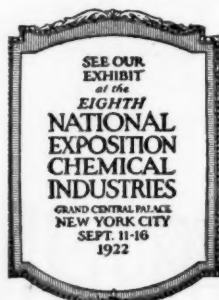
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October 19th to 25th Inclusive

Will open at ten o'clock. Thursday morning, October 19th, will be closed Sunday and re-open Monday. It will end Wednesday night the 25th.

This exposition is one of the most important events of its kind in the world. The South spins and weaves a large portion of the world's production of cotton.

Here will be seen textile machinery, devices, appliances and supplies. No manufacturer can afford not to be informed of the latest inventions, improvements and equipment. The superintendent, overseer or secondhand who misses this will be handicapped in performing his work. Every mill operative, who can possibly do so, should visit it.

Numbers of mills consider payment of expenses of principal employees to and from the show, a good investment.

It will require several days to see all the show. One day however, is better than none.

We invite all who have an interest in the industrial development of the country to attend.

TEXTILE HALL CORPORATION

Tex., Gonzales—School.—Atty. General, Austin, approved \$29,000 bond issue. Address The Mayor.

Tex., Houston—Drainage—Harris County Drainage Dist. No. 8, sold \$56,000 6% bonds at 92.

Tex., Nacogdoches—School—Atty. General, Austin, approved \$50,000 bond issue. Address The Mayor.

Tex., New Braunfels—Street and Bridge—City sold \$50,000 6% bonds; \$500 denomination, to J. L. Arlitt, Austin, for 103.75 and interest.

Tex., Reagan—School—City voted \$10,000 bonds. Address The Mayor.

Tex., Richmond—Bridge—Fort Bend County voted \$100,000 bonds. Address County Commrs. (Lately noted.)

Tex., Sherman—School and Street—City, J. B. Wilson, Mayor, sold \$100,000 school and \$50,000 street bonds to Taylor, Ewart & Co., Stacy & Braum, Chicago, and the Detroit Trust Co., Detroit, at par plus a premium of \$7589.

Tex., Tenaha—School—City voted \$100,000 bonds. Address The Mayor.

Tex., Tyler—Road—Smith County, D. R. Pendleton, Judge, sold \$360,000 5½% bonds to Well, Roth & Co., Cincinnati, at 100.31.

Va., Richmond—Road—Henrico County, Fairfield Dist., R. Carter Scott, County Judge, vote Sept. 12 on \$145,000 bonds.

W. Va., Morgantown—Improvement—Town voted \$750,000 street and municipal bldg. bonds. Address The Mayor.

W. Va., Wayne—Road—Wayne County Court votes Aug. 8 on \$15,000 bonds.

Financial Notes.

Md., Baltimore—Reliable Loan Assn., 1613 W. North Ave., increased capital from \$500,000 to \$2,000,000.

Tenn., Knoxville—Knoxville Savings & Loan Corp., contemplates increasing capital from \$100,000 to \$200,000. Directors are: R. G. Wright, Dan Chambliss, J. Albert Robbins and others.

Va., La Crosse—Bank of La Crosse, O. F. Northington, Vice Pres., increased capital from \$10,000 to \$50,000.

Trade Literature.

Power Scrapers and Excavators.

Sauerman Bros., Chicago, Ill., have issued Pamphlet No. 16 entitled Sauerman Bottomless Power Scrapers, which are operated by a two-drum hoist. A wire rope is attached to the front bridle of the scraper bucket and this cable, called the load line, extends across the dumping point to a guide sheave and thence to the front drum of the hoist. Another cable is attached to the back of the scraper and extends to a tall block at the back of the excavation and from there to the rear drum of the hoist. The scraper will dig or dump to any desired point. Fine pictures show these scrapers at different kinds of work and the reading matter gives full particulars about them. Pamphlet No. 17 issued by the same firm tells all about their dragline cableway excavators and especially concerning how they are used in handling sand and gravel. This type of cableway consists primarily of a scraper bucket attached by flexible chain connections to a carrier running on an inclined track cable, the cable being supported at its upper end by tension blocks to a well-guyed

mast and anchored at the lower end to a movable A-frame or bridge anchorage. The maximum economical span is from 500 to 800 feet, but spans up to 1000 feet are being used. A load cable is attached to the front of the bucket and carrier, this cable leading the bucket and conveying it along the track cable to the dumping point. A tension cable operates the tension blocks at the top of the mast. There is a diagram to show the operation of the entire device. There are many good illustrations showing these excavators at work, besides other pictures showing different types of buckets, etc.

Elected President and Chairman.

Anson W. Burchard, vice chairman of the board of directors of the General Electric Co., has been elected president and chairman of the board of the International General Electric Co., succeeding Gerard Swope, its former president, who was recently chosen president of the General Electric Co., and Charles Neave, former chairman of the International Electric Co., who has resigned. Mr. Burchard has had a wide experience in foreign affairs through personal familiarity with international engineering, commercial and financial problems.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Reduced Prices for Explosives.

The Hercules Powder Company, Wilmington, Del., have announced reduced prices on Hercules high explosives and blasting powder effective July 1. Full particulars may be obtained from any office of the company.

Successful Test of Enamel Finish.

Enamels manufactured by Berry Brothers, Detroit, Mich., have been chosen after a competitive test with four other products for the whole interior finish of the Nurses' Home of Harper Hospital, at Detroit. It is stated that in making the test, five rooms were selected and each was finished with a different product without even the workmen being acquainted as to the makers thereof, the result being that the room finished with Luxeberry enamel was chosen as the best.

Offices in New Location.

The Standard Inspection Company, inspecting engineers, Pittsburgh, Pa., on July 1 moved their offices and testing department to the ninth floor of the Century Building on Seventh street in that city. The company inspects materials for construction, such as rails, rail fastenings, cars, locomotives, bridges and buildings, steel, cast iron, and either steel or wood stave pipe, besides lumber, paving brick, creosoted wood block, cement and concrete construction.

Southern Sales Agent Wanted for Steel Dump Truck Bodies.

The Hell Co., Milwaukee, Wis., manufacturers of steel dump truck bodies and hoists for motor trucks, is desirous of getting in touch with firms equipped to handle their line in the Southern States. This company originated and developed the combination dump body used by contractors and general trucking companies, and more recently it has designed and perfected road building equipment for short wheel base trucks. The complete Hell line includes bodies, hoists and tanks for every purpose. The company is an old established one, having been founded in 1901.

Engineering Office Opened.

A. B. Neumann, who as chief engineer for the United States Steel Corporation, designed and built its large steel plant at Gary, Ind., and who for three years was chief consulting engineer for the Steel & Tube Company of America, has opened offices as consulting engineer in the People's Gas Building, 122 South Michigan Ave., Chicago, Ill. While with the last named company Mr. Neumann built its two-vessel Bessemer plant at Indiana Harbor and prior to that he was occupied with other important engineering and construction work. Recently he has engaged in making appraisals of power, steel and manufacturing plants.

Sale of Important Mill Properties.

The sale of the B. B. and R. Knight, Inc., properties at Hyde Park and Manchaug, Mass., which was conducted June 27 and 28 by J. E. Conant & Co., auctioneers, of Lowell, Mass., resulted in the sale of the Readville Mill plant at Hyde Park to Francis M. Smith for \$75,000 plus taxes for the current year; the machinery encased on storage there for \$6914; the 25 houses and vacant lots for \$39,112.50, plus taxes, the dwellings varying in price from \$1300 up to \$3950 inclusive, and making the total sale at that place \$128,497. The Manchaug Mills plant was also sold to Francis M. Smith and brought \$225,000 plus taxes for the current year, while standing timber was disposed of for \$8900 and 63 houses for \$95,725 plus taxes—these varying in price from \$1000 up to and including \$3100—making the total sale at Manchaug \$348,503 and the grand aggregate at both places \$476,980.

Many Changes in Personnel.

Important changes have been made in the power sales department of the Westinghouse Electric Co., East Pittsburgh, Pa. L. C. Bullington, assistant to the manager of the power department, has been made assistant manager and will have charge of the general work of that department; Charles F. Lloyd, formerly manager of the sub-station section has been made manager of the electric division, and R. E. Carothers, formerly manager of the turbine section, has been appointed manager of the steam division. Bruce H. Lytle now becomes manager of the sub-station section and D. O. Tylee manager of the turbine section. Other appointments are as follows: R. B. Mildon, general manager stoker department, South Philadelphia, Pa.; G. A. Sacchi, formerly manager of the stoker section, is now manager of stoker sales with headquarters at South Philadelphia; Edgar Woodrow, manager contract division, stoker department; F. G. Hickling, manager railway division, Pittsburgh district office; C. C. Curry, formerly branch manager Minneapolis office, assigned to special work in connection with St. Paul Electric Co.; Norman Stewart, branch manager Minneapolis office; S. R. Shave, manager price section, power and railway departments; M. C. Rypinski, of the radio sales division, has transferred his headquarters to New York as a branch of the sales department; A. Heckman, works electrical engineer for the East Pittsburgh works; F. R. Kohnstamm appointed acting manager appliance section of merchandising department and located at Mansfield, O.; J. W. Robinson will succeed C. E. Allen as manager central station division of Chicago office; H. A. Lynette, appointed syndicate representative central station division, Chicago office.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close July 31, 1922.

PROPOSALS FOR STEEL HULL.—U. S. Engineer's Office, Montgomery, Ala.—Sealed proposals will be received here until 11 A. M., July 31, 1922, and then opened, for furnishing one steel hull for dipper dredge Upatoi. Further information on application.

Bids close July 25, 1922.

PROPOSALS FOR WIRE MESH AND MACHINE BOLTS.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering wire mesh and machine bolts will be received at this office until 11 a. m., July 25, 1922, and then opened. Further information on application.

Bids close July 15, 1922.

PROPOSALS FOR ONE MARINE TYPE REFRIGERATING AND ICE-MAKING PLANT.—Office Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals for furnishing and delivering one Marine Type Refrigerating and Ice-Making Plant will be received at this office until 11 a. m., July 15, 1922, and then opened. Further information on application.

Bids close July 24, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 28, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., July 24, 1922, for New Sanitary Sewer, etc., at the United States Post Office and Custom House at Eagle Pass, Tex., in accordance with specification and drawing, copies of which may be had at this office or at the office of the Custodian, Eagle Pass, Tex., in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close July 31, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 10, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., July 31, 1922, for the Mechanical Equipment of the East Wing of the U. S. Veterans' Hospital, Norfolk, Va., (Tanner's Creek Site), in accordance with specification and drawings, copies of which may be had at this office or at the office of the Superintendent of Construction, at the building, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close July 31, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 5, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., July 31, 1922, for the construction (exclusive of mechanical equipment) of an Additional Wing to the main Hospital Building, of the United States Public Health Service Hospital at Tanner's Creek, Norfolk, Va., in accordance with drawings and specifications, which may be obtained from Neal A. Melick, Superintendent of Construction, at the site of the hospital, Norfolk, Va., or at this office, in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid, shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

Bids close July 25, 1922.

PROPOSALS FOR special bronze, sheet lead, copper wire nails, steel rivets, cast iron tees, night latches, flax packing, asbestos gaskets, varnish brushes, ticking, fire clay bricks, paint, varnish, paint remover, shellac, linseed, creosote, ammonia and cylinder oils, acetone, salt water soap, paper drinking cups, and toilet paper. Sealed proposals will be received at the Office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10:30 o'clock a. m., July 25, 1922, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and information relating to this Circular (1487) may be obtained from this Office or the offices of the Assistant Purchasing Agents, 24 State Street, New York City, and 611 Gravier Street, New Orleans, La.; also from the United States engineer offices in the principal cities throughout the United States.—A. L. Flint, General Purchasing Officer.

Bids close July 25, 1922.

\$500,000 4½% Road and Bridge Bonds

OFFICE OF THE COMMISSIONERS
OF CHATHAM COUNTY AND
EX-OFFICIO JUDGES

Savannah, Ga., June 29, 1922.
Bids will be received at this office until Tuesday, July 25, 1922, no later than 12:30 p. m., for the purchase of the following bonds:

\$250,000.00 Savannah River Bridge Bonds, expiring \$12,000.00 in 1933 and \$12,000.00 each year thereafter until 1952, when \$22,000.00 will expire.
\$250,000.00 Permanent Roads Bonds, \$12,000.00 expiring in 1933 and \$12,000.00 each year thereafter until 1952, when \$22,000.00 will expire.
Bonds dated August 2, 1922, and are in denomination of \$1000.00 each. Interest coupons payable February 1st and August 1st of each year.

Principal and interest payable at the office of the County Treasurer, Chatham County, Savannah, Ga., and at the Hanover National Bank, New York City, and the National Park Bank, New York City.
These bonds are the direct obligation of Chatham County and there has been irrevocably levied a continuing annual tax sufficient in amount to pay principal and interest.

These bonds have been validated by judgment of the superior court of Chatham County, which validation under the laws of Georgia renders them incontestable forever. Each bond bears a certificate to this effect signed by the clerk of the superior court of Chatham County. Legality of issue and form of bond approved by George W. Owens, County Attorney, Savannah, Ga., and Storey, Thorndyke, Palmer & Dodge, attorneys of Boston, Mass.

Each bid must be accompanied by a certified check, cash deposit or bidder's bond made payable to Chatham County for 2% of amount of face value of bonds bid for.

Certified checks, cash deposit or bidder's bond will be promptly returned to unsuccessful bidders.

The Commissioners reserve the right to reject any or all bids or to sell all or any part of the issue.

The bonds may be registered as to principal and interest with the County Treasurer at the Court House, Savannah, Ga.

Any additional information desired will be furnished upon application to the County Commissioners.

Bids must be sealed, addressed to the Commissioners of Chatham County and Ex-Officio Judges, Chatham County Court House, Savannah, Ga., and marked "Bids for Roads and Bridge Bonds."

This 29th day of June, 1922.

OLIVER T. BACON, C. C. C.

A. B. MOORE, C. C. C.

ALBERT WYLLY, C. C. C.

W. V. DAVIS, C. C. C.

G. REUBEN BUTLER,

Clerk, C. C. C. (L. S.)

Bids close July 20, 1922.

\$80,000 6% Road and Bridge Bonds

Palatka, Fla.
Sealed proposals will be received until July 20, 1922, for \$80,000 Special Road and Bridge District No. 5 Bonds, in Putnam County, Florida, being 80 bonds of \$1000 each, drawing six per cent per annum, payable semi-annually, principal and interest payable at Hanover National Bank of New York City, due from three to 23 years after date. For further information and form of proposal write R. J. Hancock, Clerk, Palatka, Fla.

W. F. GLYNN, chairman,
Board County Commissioners,
Putnam County, Florida.
R. J. HANCOCK, Clerk,

Bids close August 14, 1922.

\$750,000 6% Bonds

Dothan, Ala.

The City of Dothan will receive sealed bids at the Council Chamber in the City of Dothan for the sale of bonds issued by the City of Dothan, on the first day of April, 1921, in the aggregate sum of seven hundred and fifty thousand (\$750,000) dollars, in denominations of one thousand (\$1000) dollars, each, to bear interest at the rate of six per centum per annum, payable semi-annually on the first day of October and April of each year, and to become due and payable 20 years from the date of their issuance, to raise money and provide means for the purpose of providing and constructing a water works plant to pump, provide and deliver water in and to the City of Dothan, for the uses of said city and the inhabitants thereof, and to generate and transmit electricity for such purposes at or near what is known as Chalkers Bluff, on the Choctawhatchee River, in Geneva County, Alabama and transmission lines therefrom into the said City of Dothan, Ala., to be known as "Water Works Plant Bond Issue," until 8:00 o'clock P. M., August 14, 1922.

Each bid shall be accompanied by a certified or New York Exchange check in the sum of 5% of the total sum of seven hundred and fifty thousand (\$750,000) dollars, as a guarantee that the purchaser will carry out his contract for the purchase of said bonds above described.

The right is reserved to reject any and all bids.

R. W. LISENBY, Clerk.

Bids close August 3, 1922.

Street Paving

Lenoir, N. C.

Proposals will be received by the City of Lenoir, N. C., until 2 o'clock P. M., Thursday, August 3rd, 1922, for grading and paving certain streets with either sheet asphalt, bitulithic, asphaltic concrete, asphalt macadam, or cement concrete.

The work will embrace approximately 35,000 square yards of pavement, 26,000 lineal feet of combined concrete curb and gutter, 12,000 square yards of cement sidewalks, considerable storm drain, and accessories.

Plans will be on file and may be seen at the office of the City Clerk, Lenoir, N. C., or at the office of The Ludlow Engineers, Winston-Salem, N. C., after July 15th, 1922. After that date copies of the Specifications, Bid Blank, and Contract may be obtained from the Engineers or City Clerk. For the convenience of prospective bidders the Engineers will furnish copies of the plans upon application accompanied by a check for ten (\$10) dollars to cover the cost, or separate prints at one (\$1) dollar each.

Each bid must be accompanied by a certified check in the sum of \$10,000, or five per cent (5%) of the amount of partial bids on the work.

Proposals will be opened publicly with the usual rights reserved.

Plans and supervision by THE LUDLOW ENGINEERS, Winston-Salem, N. C.
V. D. GUIRE, Mayor,
F. H. COFFEY, Chm. St. Com.

Bids close July 18, 1922.

\$200,000 6% Road Bonds

Buchanan, Ga.
The Commissioners of Roads and Revenues of Haralson County, Georgia, will receive sealed bids until 12 o'clock, noon, on Tuesday, July 18, 1922, for \$200,000 of 6 per cent Haralson County Road Improvement Bonds, said bonds having been validated by the court as required by law, and a tax sufficient to pay the interest and principal of said bonds, having been levied, as provided by law. Each bid must be accompanied by a certified check of 3 per cent of bid. Bonds to be dated July 1, 1922. Interest payable on January 1, 1922. Bonds mature, \$8000 on January 1, 1927 and \$8000 January 1 each year until entire series is paid. Not redeemable before maturity. Principal and interest can be made payable in New York or Chicago. Coupon bonds, exempt from tax. Denominations, \$1000 each. Issued under Georgia laws. Buyer to furnish engraved bonds and legal opinion. Assessed valuation, real and personal property for 1921, \$4,661,870. True value, estimated, \$10,000,000. No other bonded debt. Floating debt, \$92,000. Population, 1920 census, 14,440. Population, estimated 1922, 15,000. Right is reserved to reject any and all bids. Any further information will be gladly furnished by

GAINESS F. DODSON, Clerk,
Board of County Commissioners.

Bids close July 18, 1922.

Paving Construction

Miami, Fla.
Sealed proposals will be received by THE COMMISSION OF THE CITY OF MIAMI, FLA., at the City Hall in Miami, Fla., until 11 A. M., at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Bituminous Macadam Pavement.

The work will consist of 170,819 square yards of bituminous macadam paving and will be divided into 8 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2 1/2 per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of the proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of \$10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Bids close July 18, 1922.

Sidewalk Construction

Miami, Fla.
Sealed proposals will be received by THE COMMISSION OF THE CITY OF MIAMI, FLA., at the City Hall in Miami, Fla., until 11 A. M., at the regular meeting of the Commission, Tuesday, July 18th, 1922, for the construction of Concrete Sidewalks.

The work will consist of approximately 24,683 square yards of concrete sidewalk, and will be divided into 2 contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 2 1/2 per cent of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of the proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of \$10, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Bids close August 2, 1922.

Road Improvement
SOUTH CAROLINA STATE HIGHWAY DEPARTMENT,

F. A. Project No. 66-Richland Co.

Columbia, S. C.

Notice is hereby given that alternate bids for the paving of 15.1 miles of the Columbia-Camden Highway in Richland County will be received at the office of the Richland County Permanent Roads Commission, Room 31, Arcade Building, Columbia, S. C., until 12/00 o'clock noon Wednesday, August 2, 1922.

The work to be done consists of the following approximate quantities:

27,000 cu. yds. Common Excavation (including shoulders.)

161,000 sq. yds. of Pavement.

Alternate proposals may be submitted on 7" plain cement concrete pavement or 5" concrete base with either asphaltic concrete, or sheet asphalt wearing surfacing.

A certified check or bidders' bond for Five Thousand Dollars (\$5000.00) made payable to the Chairman of the South Carolina State Highway Commission must accompany each proposal. Only one check will be required to bid on all three types.

Plans, specifications and proposal forms are on file at the office of the Richland County Permanent Roads Commission, Arcade Building, Columbia, S. C. and at the offices of the State Highway Engineer, 1626 Main Street, Columbia, S. C.

Plans will be furnished upon request to the State Highway Engineer accompanied by a check for Five Dollars (\$5.00) and no refunds will be made for plans returned.

Bids close July 25, 1922.

State Highway

STATE OF MARYLAND

STATE ROADS COMMISSION

Baltimore, Md.

SEALED PROPOSALS for building eight sections of State Highway, as follows:

Anne Arundel Co., Cont. AA-24—One section of State Highway along the New Cut road from end of Cont. 293, to Pumphrey, a distance of 1.3 miles. (Concrete.)

Allegheny Co., Cont. A-23—One section of State Highway along the Old National Pike from Cumberland toward Allegheny Grove, for a distance of 1.2 miles. (Macadam Resurfacing.)

Allegheny Co., Cont. A-24—One section of State Highway from Frostburg to the Swimming Pool, a distance of 0.26 miles. (Concrete.)

Howard Co., Cont. HO-16—One section of State Highway from Clarksville toward Dayton, a distance of 1.5 miles. (Concrete.)

Montgomery Co., Cont. M-33—One section of State Highway from Lelands Corner to Campbells Corner, a distance of 1.5 miles. (Concrete.)

Baltimore City, Cont. BC-40—One section of State Highway along 25th Street between the York Road and the Harford Road, a distance of 0.75 miles. (Sheet Asphalt.)

Baltimore Co., Cont. B-46—One section of State Highway along the Philadelphia Road from Golden Ring toward the Harford Co. line, for a distance of 3.7 miles. (Alternate bids—Sheet Asphalt and Concrete.)

Queen Annes Co., Cont. Q-24—One section of State Highway from end of Cont. Q-16 at Winchester to King's Store, a distance of 1.8 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., Standard Time, on the 25th day of July, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By ORDER of the State Roads Commission, this 6th day of July, 1922.

J. N. MACKALL,

Chairman.

L. H. STEUART,

Secretary.

Bids close July 31, 1922.

Concrete Highways

Greenville, N. C.

Sealed bids will be received by the Pitt County Highway Commission, at their office in Greenville, N. C., on Monday, July 31, 1922, at noon, for the paving with concrete five miles of highway 16-ft. width, between Greenville and Falkland, and also for paving seven miles of highway 16 ft. in width, with concrete between Greenville and Cox Mill.

Bids will be received for both projects as a whole, and also each project separately. Grading completed.

The Highway Commission offers its Industrial Railway and paving equipment for these projects, and also convict labor.

Plans and profiles may be seen at the Highway Office in Greenville, N. C.

Certified check for two thousand dollars to accompany bid. The right to reject any or all bids is reserved by the Commission.

By order of the Pitt County Highway Commission.

J. B. HARDING, Engineer.

Bids close July 21, 1922.

Sidewalks

Albemarle, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Albemarle, N. C., at the Town Hall, in Albemarle, N. C., until noon, July 21, 1922, for street improvement, water and sewer lines.

The work will consist of about: 30,000 sq. yds. of cement sidewalk, 9,000 cu. yds. of grading.

Proposals must be marked "Proposal for Sidewalk Improvements."

All bids must be upon blank forms provided in the Proposal and Contract and Specifications.

Each bid must be accompanied by a certified check for \$3000.00 as evidence of good faith.

Plans and specifications will be on file at the clerk's office in Albemarle and at the office of the Engineer in Durham, N. C. The right is reserved to reject any or all bids.

O. J. SYKES, Mayor,
ELI KENDRICK, Clerk.

Engineer:
GILBERT C. WHITE CO.,
Durham, N. C.

Bids close July 26, 1922.

School

Siler City, N. C.

Sealed proposals will be received by the School Commissioners of Siler City, N. C., at noon, July 26, 1922, for the erection and completion of a school building at Siler City, North Carolina.

Plans and specifications may be seen at the offices of the Architect, Chas. C. Wilson, 804-9 Palmetto Bldg., Columbia, S. C. 106 Davis Bldg., Wilson, N. C.

also in the offices of the Chamber of Commerce, Charlotte, N. C. Chamber of Commerce, Raleigh, N. C.

And may be obtained upon application to the Architect, Columbia, S. C., upon deposit of Twenty-five (\$25.00) Dollars, of which Fifteen (\$15.00) Dollars will be refunded when plans and specifications are returned in good condition and without expense within fifteen (15) days of the date set for the submission of bids.

Sub-contractors can secure such portions of plans and specifications as they may desire at current blueprint prices.

All plans and specifications whether paid for or not remain the property of the Architect and are issued for use on this building only.

The right is reserved to reject any or all bids.

R. F. PASCHAL,
Secretary.

Bids close July 21, 1922.

Garbage Incinerator

Daytona, Fla.

Sealed bids will be received by the City Manager of the City of Daytona, Fla., till 3:00 o'clock P. M. Friday, July 21st, 1922, for furnishing and erecting a garbage crematory.

Bids are asked on crematories of from twelve (12) to twenty-four (24) ton capacity.

Bidders must submit complete plans and specifications covering the work they propose to do.

The right is reserved to reject any or all bids.

W. B. HODGES,
City Manager.

Bids close August 15, 1922.

Inlet

Fort Lauderdale, Fla.

Notice is hereby given that the Board of County Commissioners, Broward County, Florida, will receive bids until 11.00 A. M. on Tuesday, August 15, 1922, for the construction of an inlet from New River Sound to the Atlantic Ocean, near Ft. Lauderdale, as per plans and specifications on file in the Clerk's Office, Courthouse Bldg., Ft. Lauderdale, Fla.

Such work shall be let in two contracts, being as follows:

a) The dredging of 81,000 cubic yards more or less of earth; and the dredging of 5000 cubic yards more or less of rock;

b) The furnishing and placing of 6200 cubic yards more or less of riprap and jetty heaving and of 2500 tons more or less of jetty capping, all in riprap and jetty construction.

Separate bids will be received and separate contracts let for each of the two classes of work mentioned. Copy of plans and specifications may be secured from the Clerk upon payment of \$1.00 to cover cost of printing the same.

Each bid shall be accompanied by a certified check in the amount of 3% of the bid, guaranteeing that the bidder will make contract and bond within ten days of notice of award.

Bond on each contract will be required in the sum of 50% of the amount bid. Address all bids to the Board of County Commissioners, in care of Frank A. Bryan, Clerk, Ft. Lauderdale, Fla.

The Board reserves the right to reject any and all bids.

By order of the Board.

H. G. WHEELER, Chairman.

Attest:

FRANK A. BRYAN, Clerk,
GEO. B. HILLS COMPANY, Engineers,
Jacksonville, Florida.
Dated July 10, 1922.

Bids close July 18, 1922.

Concrete Flood Gate and Appurtenances

Little Rock, Ark.

Sealed proposals will be received by the Secretary of the Farrelly Lake Levee District at the Marion Hotel, Little Rock, Ark., until 2:00 P. M., Tuesday, July 18, 1922, for the construction of a Concrete Flood Gate and Appurtenances at Big Bayou Meto, Gillett, Arkansas County, Arkansas. Following are the approximate quantities:

Excavation	50,000 cu. yds.
Round Foundation Piles	24,000 lin. ft.
Steel Sheet Pile Cut	
Off Walls	20,000 sq. ft.
Concrete	6,500 cu. yds.
Reinforcing Steel	200 tons
Grates and Accessor- ies	150 tons
Hand Rail, 2" GI Pipe and Fittings	1,500 lin. ft.
Hand Rail, 1 1/2" GI Pipe and Fittings	1,000 lin. ft.
Hoisting Apparatus	30 tons

Detail Plans, Specifications and Blank Forms of Proposal are on file at the office of A. W. Dohyns, Attorney, Little Rock, Ark., and at the office of Ayres & Miller, McCall Building, Memphis, Tenn.

Detail Plans, Specifications and Proposal Forms will be furnished upon application accompanied by a certified check for twenty (\$20.00) dollars.

Each proposal shall be accompanied by a certified check for fifteen thousand (\$15,000) dollars, made payable to the Secretary of the Board.

This check is to be conditioned that, if the bid is accepted, a contract will be entered into and the performance of same secured within ten (10) days after notification of acceptance of bid. Successful bidder will be required to furnish a surety bond in an acceptable surety company in the sum of fifty (50%) per cent of the contract price.

The right is reserved to reject any or all bids and to waive any technical defects, as the interests of the district may require.

The Engineers, or their assistants, will be at Gillett, Ark., from July 10 to July 15, to show prospective bidders over the work.

JOHN M. GRACIE, Chairman,
Board of Commissioners.
J. B. QUINN, Secretary,
Gillett, Ark.

AYRES & MILLER, Engineers,
McCall Bldg., Memphis, Tenn.

Bids close July 19, 1922.

Electric Light Plant Improvements

Belhaven, N. C.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Belhaven, N. C., in the Town Hall in Belhaven, N. C., until 2:00 P. M., July 19th, 1922, for improvements to the Municipal Electric Lighting Plant.

These improvements will consist of an addition to the present brick and concrete power house building, furnishing and installing a 150 K. W., 187.5 K. V. A. at 80% P. F. Semi-Diesel Crude Oil Engine-Generator Unit, with direct connected exciter, a generator and feeder switchboard panel, cooling tower, etc. Alternate proposals will be considered on a full Diesel Type Unit.

Proposals must be marked "Proposals for Electric Light Plant Improvements for the Town of Belhaven, N. C." All bids must be submitted upon blank forms to be provided in copies of the proposal, contract and specifications.

Each bid must be accompanied by a certified check for five (5%) per cent of the amount of the bid, but in no case for less than \$250 as evidence of good faith.

Plans, copies of the proposal, contract, specifications, etc., may be obtained upon application to the Engineer.

The Town reserves the right to reject any or all bids and to award contracts which may appear for the best interests of the Town.

WILLIAM C. OLSEN,

Consulting Engineer, Kinston, N. C.

J. E. SHEPARDSON, Mayor.

Dr. W. T. RALPH, Chairman.

D. S. SMITH, Clerk.

Bids close July 26, 1922.

Wharf and Shed Foundation

Tampa, Fla.

Sealed bids will be received by the City Commission of the City of Tampa until 12 o'clock noon on the 26th day of July, 1922, for furnishing all materials, labor and equipment necessary to construct a reinforced concrete wharf and transit shed foundation at the municipal slip on the Estuary in the City of Tampa, according to the plans and specifications on file in the office of the City Manager, copies of which may be obtained upon application, for the sum of Ten (\$10.00) Dollars, payable in advance.

Each bid must be accompanied with a certified check for five (5%) per cent of the amount of the bid, payable to the City Clerk of the City of Tampa, to be retained by the City Commission until the contract is awarded and acceptable bonds filed, at which time checks will be returned to the unsuccessful bidders.

The right to reject any or all bids within forty-five (45) days from the date herein specified is reserved by the Commission.

Bidders are requested to examine the location before submitting bids.

Following are the estimated approximate quantities:

- Wood sheet pile bulkhead, length 2288 lineal feet.
- Wood piles for retaining wall and pedestal foundation. Number of piles 879.
- Lumber for bulkhead caps, wales and flooring. Number of feet B. M. 102,614.
- Concrete for bulkhead, retaining wall and foundation pedestals. Number of cubic yards 2186.
- Concrete platform piles. Lineal feet 19,526.
- Straight concrete platform, thirty (30) feet wide, without railroad track. Number of lineal feet 1476.
- Straight concrete platform, thirty (30) feet wide, without railroad tracks. Number of lineal feet 685.
- All concrete platform other than straight work. Number of square feet of platform 3348.
- Rock fill. Number of cubic yards 15,000.
- Earth fill. Number of cubic yards 40,000.
- Sewer outlet 36" cast iron pipe. Number of lineal feet 84.

A. W. HALL,
City Manager.

B. D. MARTIN,

City Engineer.

(Signed): C. H. BROWN,

Mayor-Commissioner.

(Attest): WM. E. DUNCAN,

City Clerk.

Bids close July 18, 1922.

Sewer Construction

Miami, Fla.

Sealed proposals will be received by "The Commission of the City of Miami, Florida," at the City Hall in Miami, Fla., until 11 a. m., at the regular meeting of the Commission, Tuesday, July 18, 1922, for the construction of

SANITARY SEWERS

The work will consist of:

Furnishing and laying approximately

65,000 feet 8" pipe.

4,000 feet 10" pipe.

3,000 feet 12" pipe.

1,500 feet 15" pipe.

With necessary manholes

and flush tanks.

and will be divided into three contracts. The bidder can bid on any or all of these contracts.

The improvements are to be constructed and payment therefor is to be made under Section 56 of the City Charter.

All bids must be upon blank forms provided in the proposal, specifications and contract.

Each bid must be accompanied by a certified check for 24% of the amount of the bid to insure the execution of the contract as provided by Section 56 of the City Charter.

The City reserves the right to reject any or all bids.

Plans and specifications will be on file at the City Hall in the office of the City Manager.

Copies of proposals, specifications and contract can be obtained from the office of Chas. W. Murray, Director of Public Service, on deposit of \$10.00, which will be refunded to those who submit bona fide bids.

F. H. WHARTON,
City Manager.

Bids close August 15, 1922.

Hydro-Electric Project

Dothan, Ala.

Sealed proposals will be received by the Mayor and City Council of the City of Dothan, Ala., until 2 o'clock, P. M., Tuesday, August 15, 1922, for constructing a Hydro-Electric Project with appurtenances, and furnishing materials and equipment, at High Bluff, on the Choctawhatchee River, about eight (8) miles from Hartford, Ala., in sections 9 and 4 of township 2N, Range 23E, Geneva County, Alabama. The work consists of the construction of an earth dam, a concrete spillway, abutments, and power house, and the furnishing and placing of machinery.

The principal approximate quantities involved are the following:

51,000 cu. yds. of excavation.

380,000 cu. yds. of embankment.

18,500 cu. yds. of concrete of different classes.

1,900,000 pounds of reinforcing steel.

354,000 pounds of structural steel work.

Turbines, generators, transformers, and auxiliary power house equipment for a present installation of approximately 3000 BHP capacity in two units.

A transmission line twenty-one and one-half (21 1/2) miles long at 44,000 volts pressure.

Plans and specifications are on file at the office of the City Clerk at Dothan, Ala., and at the office of the Ludlow Engineers, at Winston-Salem, N. C., where they may be examined by prospective bidders.

Copies of the plans covering the construction details of this project and two copies of the specifications attached to the form of proposal and contract will be furnished by The Ludlow Engineers, Winston-Salem, N. C., upon application by prospective bidders accompanied by a check for twenty-five (\$25.00) dollars to cover the cost, or separate prints, and extra copies of specifications and form of proposal, etc., at one (\$1.00) dollar each.

Each bid must be accompanied by a certified check for approximately five (5%) per cent of the bid.

Proposals will be received at the City Hall, Dothan, Ala., and opened publicly with the right reserved to accept any bid or to reject any or all bids as the best interests of the City may appear.

Plans and supervision by THE LUDLOW ENGINEERS, Inc., Winston-Salem, N. C.

E. O. JONES, Mayor.

R. W. LIENSBY, City Clerk.



CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWERS, MISCEL- LANEOUS PROPERTIES,

FOR SALE—Minerals on a tract of 257 acres in Buckingham County, Va., on the James River, opposite Norwood Station on the James River Division of the Chesapeake & Ohio Railway.

There is on this tract of land good deposits of marble as well as other minerals. This land will be sold either by the surface or minerals. For further information apply to Brown & Brown, Attorneys, 804 Peoples Bank Building, Lynchburg, Va., or to Mrs. A. L. McC. Whelan, Norwood, Va.

FOR SALE—2500 acres unimproved coal and farming land, \$35 per acre; has several seams; top seam drift; adjacent railroad, mines, gas and prospective oil. Write Cavanagh, McAlester, Okla.

POTASH land at \$12.50 per acre might make you rich. \$100 is price of eight acres interest in 2400 acres patented land, including all oil and mineral rights. Located at station on T. & P.; on Bankhead national highway; in Ector and Crane counties, Texas. Particulars free. C. H. C. Anderson, 805 Delaware Ave., Dallas, Tex.

TO INVESTORS

Can save you money on going coal mines—undeveloped coal lands—oil and gas lands—timber tracts or factory sites. E. H. Morris, Box 518, Charleston, W. Va.

IRON ORE

FOR SALE—Several hundred million tons of very rich red and brown iron ores. Close to river and rail. C. G. Samuel, Athens, Tenn.

COAL LANDS AND MINES

Going mine in Ohio Valley up to date equipped; with 3000 acres Pittsburgh 8 coal in its best form. Connelville Coking coal. 10,000 acres Pgh. on R. R. and Ohio River. 5,000 acres Middle Kittanning, Athens County, O. Large block West Va. hardwood, virgin. G. O. Smith, Wheeling, W. Va.

COAL LANDS AND MINES

FOR SALE

Operating Elkhorn Mine—Located on S. V. & E. R. R., Pike County, Ky. Leasehold—well equipped. For particulars address B. N. Ford, Box 871, Cincinnati, Ohio.

FOR SALE—Seventeen hundred acres fee coal land on the main line of the Norfolk and Western Railway Company. Non-union field. Four workable seams (steam, domestic and bi-product coals). Valuable timber on property. Railroad sidings granted. If interested write Drawer G. Williamson, West Virginia.

FOR SALE

Jellico Tennessee Mine—Located on Southern and L. & N. R. R.'s. Now operating. Leasehold—1400 acres—average thickness 40"—no parting—good roof and bottom. Well equipped, 90 houses, shaker screens. Daily capacity 500 tons. Address B. N. Ford, Box 871, Cincinnati, Ohio.

COAL AND TIMBER LAND

REAL BARGAIN

8000 acres, 15 miles from Richmond, Va., no waste, underlaid with six feet of good coal. Coal mine recently put in operation on the adjoining property now shipping 100 tons per day and expect to increase to 600 tons daily in near future. In a few years the land value should be double the price asked, and the growth of young timber ought to pay for the property, independently of the coal. Fine hunting, deer, turkey, quail, etc. Price \$15.00 per acre.

R. B. Chaffin & Co., Inc.
Richmond, Va.

RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. *When the advertisement contains a number of long words, proper allowance should be made.* Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 500 lines or more, 25c. per line.

FULLERS EARTH

Extensive deposit high-grade fullers earth. Strata known to be 22 feet thick; light overburden. R. R. near. Will sell or lease. E. H. HOPKINS, Owner, Reddick, Fla.

FARM AND TIMBER LAND

FOR SALE

11,000 ACRES—FARM AND TIMBER LANDS.

E. A. Reid and E. B. Dyer, of Charleston, West Virginia, Executors of the estate of George S. Couch, Sr., deceased, as such, have for sale 11,000 acres of surface and timber lands, (locally known as Brown, Swann and Goshorn Lands), situated in the Counties of Clay and Roane, West Virginia, lying on the waters of Elk river and tributaries and on the waters of Big and Little Laurel Creeks, tributaries of Elk River, and their tributaries, and on the waters of Grannies Creek, and other streams in Roane County, and their tributaries.

The white oak and poplar on this land, down to sixteen inches, was cut twenty-two years ago, but large portions of the land is still well timbered.

The Executors will sell these lands as a whole, or for farming purposes, in any size tracts the purchasers may desire, or will sell the timber separately in any size tracts.

The land is excellent for farming purposes, and a Class "A" State road has been located through about five miles of the property, which will give an outlet to all these lands. In fact, the new State road already graded from Clay Court House, leading toward Roane County, runs partly through this land now.

On large quantities of the land the timber will pay for the land, if properly marketed.

The prices for the surface and timber run from \$12 to \$20 per acre, and the prices for timber alone, from \$8 to \$12 per acre. For information, call on, or write to, E. R. DYER, Morrison Building, Charleston, West Virginia.

TIMBER LAND

Several tracts of hardwood, ten to thirty million feet, shipping points Southern Ry. Address W. J. Elliott and Son, Palmetto Bank, Columbia, S. C.

FOR SALE—40,000,000 feet virgin hardwood timber, 4500 acres in Swain County, N. C., within 1½ miles railroad. Finest quality big soft yellow poplar, mountain oaks, basswood, ash, cherry, maple, chestnut and hemlock. In two rich coves, all down grade to mill site. Native labor plentiful. Unexcelled as an investment. Savage Bros., Murphy, N. C.

600 acres Oak gum and Pine timber and Land, just by station. Two mile frontage on fine road; \$25 per acre; terms to suit. M. P. Malcolm, Princess Anne, Md.

TIMBER OPERATIONS

HARDWOOD TIMBER AND MILL FOR SALE. 6000 acres well blocked cruising about 30,000,000 ft., 25% oak, 50% gum, 25% hickory, cypress, beech, hackberry and pine. On Southern Railway and Tombigbee River, 50 miles from Mobile. Price \$5 per M. for stumpage; \$5 per acre for land in fee.

New 30,000 ft. capacity band mill, planer, 4 miles steel railroad, logging tractor, ox and mule teams at fair appraisal value. F. J. Washchek & Co., 66 St. Francis St., Mobile, Ala.

TIMBER

BARGAINS IN BRITISH COLUMBIA CEDAR TIMBER

Deal with us and you deal with the owners. When writing indicate size of tract and terms desired. J. Randall Black, Suite 16-18 Flack Block, Vancouver, B. C.

HARDWOOD STUMPAGE. 25 million feet Oak, Ash, Poplar, Red Gum, some Pine, solid body on railroad near Hattiesburg, Miss. Address W. A. Kanorr, Laurel, Miss.

STANDING TIMBER

17,000,000 feet original oak and pine timber; 9,000,000 feet is oak over 3 feet diameter on 2107-acre improved farm, 800 acres cultivated, 8 miles to station, Pennsylvania Railroad between Richmond and Washington, \$60 acre. Lafayette Mann, 1815 W. Grace Street, Richmond, Va.

REAL ESTATE WANTED

WANTED—Timberland and Income Properties, anywhere direct from the owners. Write Chas. A. Philidus, 510 E. 120th St., New York.

CITY AND SUBURBAN PROPERTY

HOMES IN THE NATIONAL CAPITAL Any size or price, also nearby Maryland and Virginia farms and suburbs.—Arthur M. Connor, 726 14th St., N. W., Washington, D. C.

FARM FRUIT, AND TRUCK LAND

ARKANSAS

The rice growing section of Arkansas is coming into its own again. I wish to hear from investors with vision enough to buy before the advance in prices certain to occur. Reference: Peoples National Bank. Geo. C. Lewis, Stuttgart, Ark.

Arkansas farms producing cotton, grain, fruit, truck, poultry, and dairy, healthy climate. Write for list. F. J. Baltz Pocomantas, Randolph County, Arkansas.

COLORADO

COLORADO LAND. Irrigated land in 10-acre tracts up; small payment and easy terms; would exchange some. For particulars write P. O. 102, Olney Springs, Colo.

CANADA

FARM FOR SALE—One half mile to town. \$7.50 per acre, good land, good water, clear title. Owner wants to go away. For description, write to J. J. Holleman, Birch River, Manitoba, Canada.

FLORIDA

COME TO FLORIDA this summer, and enjoy a real vacation, where the breezes blow all the time. Summer resort excursion rates; inquire of your local railroad agent. We have a home, grove or farm for you. Send for booklet and 1922 summer list. Tampa-West Coast Realty Co., Opp. Post Office, "Since before the War", Tampa, Fla.

20 acres Fruit and Vegetable farm, in Redland District. Has produced \$8000 revenue, within last three years. Price \$5775. Easy terms. Write for particulars. Wilmer-Cast, Homestead, Fla.

FLORIDA

"For sale 160 acres land 40 acres in orange grove, over half bearing on Pinellas Peninsula 6 miles Clearwater 25 miles Ft. Tampa, quarter mile brick road, completely equipped with teams, sprayer tools, etc., sheep at \$28,000. Will take good farm in any of Southern States to value of \$11,000 and will carry \$10,000 on mortgage. Address Box 63 Crystal River, Fla."

NORTH CAROLINA

FOR SALE—Ideal Mountain Farm containing 30 acres, with good, 9-room house, garage, barn; 200 bearing apple trees within one mile county seat. Four miles to the Great Grandfather Mountains. 6000 feet altitude; highest courthouse East Rockies. For price and terms communicate with The J. & B. Construction Co., Newland, N. C.

OKLAHOMA

80 acre, Fruit Farm at Tulsa, Okla., beginning to market crop. Bargain, write at once for full particulars to W. A. Everett, 1415 East Third St., Tulsa, Okla.

PENNSYLVANIA

FARM of 275 acres, in Pennsylvania; large mansion house with all improvements; barn for 50 head stock; equipped with James system; latest machinery and equipment; stream through meadow; 150 acres woodland; offered at a sacrifice price. K. T. McDADE, Postoffice Bldg., Phoenixville, Pa.

SOUTH CAROLINA

Truck farms that pay dividends annually can be bought at reasonable prices here. Vegetables are shipped eight months in the year. Three and four crops are grown on the same land annually. Excellent climate and health. Plenty of labor; strikes unknown. Well organized association that sells all farm products. For particulars write, Lake Realty Company, Beaufort, S. C.

VIRGINIA

FOR SALE—5½ acres good land, 3¼ miles from city market, new 6-room house, free stone, water, garage, in good neighborhood. No loan, \$6250. Terms, W. A. Dyer, Route 4, Box 8, Roanoke, Va.

COLONIAL RIVER ESTATE—Rich farming land. Historic mansion built in 17th century, stands on terrace. Grounds of great beauty. House and out-buildings in perfect condition. Delco lights, modern plumbing and heating; splendid artesian well. Convenient location. Fine roads. Rare antique furniture. Worth \$100,000. Can be bought for much less. Box 889, Richmond, Va.

BUSINESS OPPORTUNITIES

FOR SALE—Old established Copper and Galvanized Iron Works. Business has been carried on at this stand for the past 40 years. Will sell outright or take partner with small amount of capital. C. Wessendorf Co., 195-197 Washington Ave., Memphis, Tenn.

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW, Harlow Building, Colorado Building, Alexandria, Va. Washington, D. C.

If interested in the BEST SECTION OF THE SOUTH If you want a Cotton Mill, or Southern Mill Stocks or Investment in Central Real Estate or Large Suburban Development property or a Manufacturing Site Address

F. C. ABBOTT & COMPANY Trust Building, Charlotte, N. C.

Interest open in Marine Transportation and Commission Company. Business enough from South to earn \$300,000 Net Annually. 25% on capital invested. Alfred S. Perry, Perry Building, Fairfield, Conn.

FOR SALE—By owner, family hotel, 6 miles south of Palm Beach, the fastest growing town on East Coast. For particulars address New Jersey Hotel, Lake Worth, Fla.

FOR SALE—Ink Manufacturing Process, Large Profit Guaranteed. For Particulars Write E. P. McKinnis Co., Tyler, Tex.

PATENT ATTORNEYS

INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book, "How to Obtain a Patent" sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chand-lee & Chandlee, 412 7th St. N.W. Washington, D. C.

PATENTS, TRADE-MARKS AND COPYRIGHTS—Write for our Free Illustrated Guide Book and EVIDENCE OF CONCEPTION BLANK. Send model or sketch and description of your invention for our opinion of its patentable nature free. Highest references. Prompt service. Reasonable terms. Victor J. Evans & Co., 712 9th St., Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. Watson E. Coleman, Patent Lawyer, 624 F St., Washington, D. C.

JACK A. SCHLEY, Patent and Trade-Mark Attorney, 306 Interurban Building, Dallas, Tex. 319 McGill Building, Washington, D. C.

COLLECTIONS

COLLECTIONS MERRIAM, 507 FIFTH AVENUE, NEW YORK CITY

CAPITAL WANTED

CAPITAL WANTED to finance irrigation pumping plants, \$1,000,000 bond issue to be secured by improved farms of 400,000 acres. A. M. Riedesel, Denver, Colorado.

FACTORY SITES

NEW ORLEANS, Commercial and Factory Sites and Buildings Gurley & Parkinson, 338 Carondelet St.

MANUFACTURING SITE,

Port of Wilmington, N. C. Two miles south of City of Wilmington, county taxes with city conveniences. About 70 acres of improved land with a 1200 foot deep water frontage on the Cape Fear River. Ideal climatic conditions for outdoor work. Six miles of standard gauge railroad track with railroad connections. Complete fire protection system, power, air and water lines, concrete roadways. Steel truss buildings 260' x 160' and 260' x 80'. Concrete storehouse. Reinforced concrete power house. Details on request.

MARYLAND WRECKING COMPANY, Carolina Shipyard, Wilmington, North Carolina.

FOR SALE

MANUFACTURING SITE PORT OF WILMINGTON, N. C. Fifteen acres of land in the city of Wilmington, N. C., fronting 900 feet on the Cape Fear River, close to the plant of the Newport Shipbuilding Company and Clyde Steam Ship Line, in easy reach of railroad, with mills and other manufacturing plants operating in the neighborhood; good freight rates by rail and water; easy communication with all parts of the country; good distributing point; fine location for storage warehouse; work outside all the year. Further details will be furnished on request to

John H. Rehder, Chairman, Wilmington, N. C.

BALTIMORE

FACTORY SITES

William Martien & Company,

1413 Lexington Bldg.,

Baltimore, Md.

FACTORY SITES

Mill Site for Sale; Fifty acres, just outside Lincoln, N. C., on branch line Southern Ry., bounded on West by South Fork River, near Transformer house. Good clay and water at hand, so brick may be made at site. J. A. Costner, Cashire, Mt. Holly Bank, Mt. Holly, N. C.

LUMBER AND BUILDING MATERIAL

Direct Mill Prices on

L U M B E R

You can effect big savings on genuine long leaf Flooring, Ceiling, Siding, Sheathing, Moulding and cut-to-length Framing by ordering direct from the producing field. Complete bills, guaranteed grades and workmanship. Submit schedule for delivered price. The Dimension Co., Lockhart, Ala.

FOR SALE—4/4 to 12/4 No. 2 Com. and Btr. S. Elm and H. Maple. Anderson-Miller Lumber Co., Ltd., Toronto, Ont.

INDUSTRIAL PLANTS

FOR SALE

Quarry and Crushing Plant, capacity six of eight cars per day, located in the heart of a State doing \$50,000,000 of road work, also within fifty miles of six growing towns and cities, doing considerable building and road work. Can get four railroad switches daily, if desired. Stone passes State and U. S. tests. Terms very reasonable. Wire or write E. P. Wharton, Greensboro, N. C.

FOR SALE—Fruit and Vegetable Package mill in Florida. Rail and water service. Beautiful town. Now making six basket carriers. Soon start orange boxes. Will not take much money to handle. Address No. 6046, Manufacturers Record, Balto., Md.

MERCHANDISE WANTED

SPOT CASH for surplus merchandise job lots, close outs, discontinued lines, goods ordered and left on hand, etc. (no machinery). No quantity too large. Quick cash for real bargains. Fantus Bros., 1319 S. Oakley Ave., Chicago, Ill.

CHINESE REPRESENTATION

BUSINESS IN CHINA—Advertiser has lived in China ten years, now manager large concern which is withdrawing from the field. Desires new connection to develop business of one or several American houses. Last three years spent largely traveling, so has valuable friendships throughout China. Straight salary or retaining salary and commission. Highest references. Reply to No. 6047 care Manufacturers Record, Balto., Md.

SITUATIONS WANTED

Construction Superintendent. 17 years experience. Would like position in charge of outside labor gangs, and construction and repair men at industrial plants. Reference. Address No. 6045 care Manufacturers Record, Baltimore, Md.

A man with experience as Supt. in concrete and asphalt street building will be open for further employment after July 15th. No booze fighter and can furnish reference. Write R. D. E., P. O. Box 156, Hertford, N. C.

"Attention, building material and equipment companies; an architect who has had executive and sales experience and who has a wide acquaintance among architects and engineers in the Eastern and Southern States desires to obtain position as Sales Engineer with large building material or equipment manufacturing concern. Is at present employed in the above capacity by large structural steel fabricating corporation in the East." Address No. 6044 care Manufacturers Record, Baltimore, Md.

Building foreman, technical graduate, five years practical experience. Address C. I. Stoutenburgh, 190 Union St., Poughkeepsie, N. Y.

MEN WANTED

WANTED—Experienced man for Reverberatory Furnace and White Metal Plant. Good job to right party. Write to Bostwick-Lyon Bronze Co., Waynesboro, Pa.

SALESMAN CALLING ON LUMBER YARD MILLS, etc., to sell sash cord, twine and rope wholesale. Commission basis. Give full information in first letter. Address Twine & Cordage Co., of Chicago, 1303 W. Lake St., Chicago.

"EXECUTIVES and men of proven ability seeking positions and our service extremely satisfactory. Our Mr. H. H. Harrison can confidentially negotiate for you suitable connections as he has done for thousands of others since 1909. Inquiries invited. The National Business Bourse, Inc., Association Building, Chicago."

We have a position open for a Superintendent of a mill making Roofing Felt. Preference given applicant experienced in similar work, but will consider application from man whose records show successful operation of a factory doing equal business—about \$1,000,000 per year. Age 32 to 42. Do not answer this advertisement unless you have had salary of \$5000 per year, or over. Address No. 6043 care Manufacturers Record, Baltimore, Md.

MEN WANTED

A LEADING ORGANIZATION desiring to fill an important position, for obvious ethical and other reasons, cannot invite directly the candidacy of any particular man. Similarly, no well-connected man will exploit personally his own qualifications, no matter how receptive he may be to overtures. The undersigned has been retained by a national clientele for many years, as a medium for negotiating preliminaries in such cases. Your permission to send booklet discussing this problem and describing the service, will in no degree obligate or compromise you. Strictly confidential. R. W. Bixby, Inc., 303 Lockwood Bldg., Buffalo, N. Y.

Several opportunities available in Southern and Western States for salesmen who are now calling on Furniture, Hardware, etc. trade to sell our complete line of Family Sewing Machines. Standard Sewing Machine Co., Cleveland, Ohio.

WANTED HELP—Marble Draftsman with five years' experience preferred. Any good detail draftsman will be considered. Permanent position to right party. Address C. T. Burman, 6 W. Randolph St., Chicago, Ill.

MACHINERY AND SUPPLIES

Information wanted on a refrigeration plant, 5 and 10 tons. Also economical oil engine to operate same. To make ice with filtered water. Edward Theriot, Houma, La.

MACHINERY AND SUPPLIES

Small lot ship augers, rubber gaskets, new. Cheap to move lot quick! Pratt Thompson, 220 E. Lexington St., Baltimore, Md.

FOR SALE—Six Heil Gravity Dump Steel Bodies for Ford Trucks. One cu. yd. capacity. Used only a few months. Sixty Dollars each. Cooper Construction Co., Tupelo, Miss.

TRACTORS—We are offering a limited number of Cletrac Model W "Tank Type" tractors at reduced prices. These tractors are absolutely new and have not been used. Speer & Watkins, Anderson, S. C.

MACHINERY FOR SALE—I have many machinery bargains of all kinds such as is used in this part of the country. Write for latest stock lists and prices. Oliver Carter, Wilmington, N. C.

STEAMER FOR SALE

REAL BARGAIN—Single screw-propelling steamer Atlantic. Registered dimensions 103.3x23.7x7.9 ft.; 3 decks, 2 large cabins on upper deck, 1 saloon deck, social hall aft, freight space forward, thoroughly overhauled and rebuilt, now at Charleston, S. C.; accommodate about 350 day passengers; built of yellow pine planking, oak frames partly sheathed with galv. iron.

HENRY A. HITNER'S SONS CO.,
4501 Richmond Street,
Philadelphia, Pa.

**SPECIAL ADVERTISEMENTS
Of GENERAL INTEREST**

Attention

Chambers of Commerce

Wanted to get in touch with a live chamber of commerce of some enterprising city that would be willing to cooperate with and aid in completing the financing of a patented electric fan having a potential national demand.

Company now organized, portion of the capital has been raised and will bear the closest investigation.

This enterprise should eventually give employment to a thousand or fifteen hundred people.

Apply Glasser Mfg., Co., Inc.
64 Broad St. : Charleston, S. C.

REFINERY FOR SALE

I am offering for quick sale a modern Refinery and Shortening Plant in good condition. Located in City in heart of Cotton District.

Also first-class six press Crude Mill in North part of Cotton Territory. Big crop.

For complete description and price write,

A-268 care Manufacturers Record



Pulaski Offers

to manufacturers seeking plants, power in abundance, ample supply of labor, both male and female; exceptional railroad facilities, low tax assessments and cheap coal rates.

If you are about to establish a factory, this is an ideal community. Let us give you complete information as to the advantages of this section.

Address B. C. Taylor, Secty.

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Quick Shipment.

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Extra Handles for same \$6.00 per Hundred.

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All machinery and engines in good condition. Presses, cookers, cake formers, crusher rolls, and Corliss engines. Low prices, for quick sale. Description on request.

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40—823 H.P. Babcock & Wilcox Stirling Water Tube Boilers, 200 lb. Pressure. Fully equipped with all accessories, including Westinghouse 8 retort stokers, Vulcan soot blowers, Forced draft fans, etc. Tested under pressure but never used.

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- 3—6' x 24' x ½" Plate
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- 3—Vertical 8' x 9' 6" x ½" Plate—jacketed and with steam coils

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4000—Single and Double Deck Cots, both Wood and Steel, 80c each.

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New and Rebuilt Full Diesel Type Oil Engines

2—450 B. H. P. vert., 6 cyl., coupled to 3-ph. 60-cyc. A. C. generators.
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Specialist in Diesel Oil and Internal Combustion Engineering

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Chemical Plant Equipment

Autochaves, Centrifugals, Dryers, Evaporators, Filter Presses, Kettles, Pulverizers, Reducers, Tanks, Refrigerating Equipment, Boilers.

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4—200 H.P. 400 volt, 233 Ampere per phase, two phase, 500 R.P.M. 60 cycles, 7200 alternations, Westinghouse Type "C" Squirrel Cage Induction Motors.

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All these motors can be reconnected for three phase service. The motors were coupling connected to our Brush Arc Generators, one coupling on each end of the shaft, and the flange couplings still remain. The motors have shaft extensions of 9 1/2" on each end, the shaft diameter being 4 1/2".

No starters, bases, couplings or pulleys go with the motors.

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- 1—Sullivan Straight Line Air Compressor, 24" steam cylinder, 26" low pressure air cylinder, 16 1/2" high pressure air cylinder, 30" stroke, capacity 1850 cu. ft. per minute.
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- 1—16" x 8 1/4" x 12" Duplex Steam.
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- 1—12" x 7" x 10" Duplex Steam.
- 1—10" x 6" x 10" Duplex Steam.
- 3—6" x 4" x 6" Duplex Steam.
- 4—5 1/4" x 3 1/4" x 5" Duplex Steam.
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- 1—72" x 15' Horizontal Tubular; 115 lbs. pressure.
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- 2—Open Top Storage Tanks, 6' 9" wide, 5' deep, 16' 3" long; 7/16" plate.
- 2—Open Top Storage Tanks, 10' wide, 3' 3" deep, 16' 3" long; 7/16" plate.
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50-ton 16x24" Four-Wheel Loco.

Modern Sta. Ga.
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Recently Overhauled

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Complete with fabricated steel mast, cables, 1 yard capacity bucket, boiler and hoisting engine. All in first-class condition. Will make an interesting price. THIS IS A BARGAIN. Full details promptly furnished.

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Steam & Electric COMPRESSORS
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Mast..... 16 in. square, 40 ft. high.
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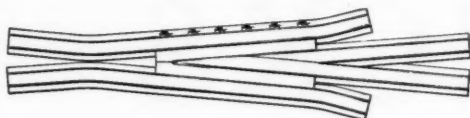
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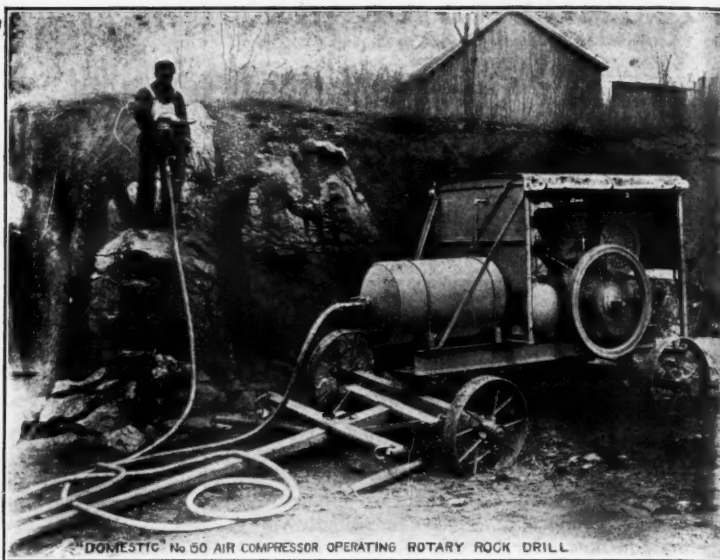
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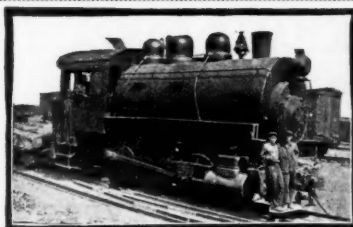
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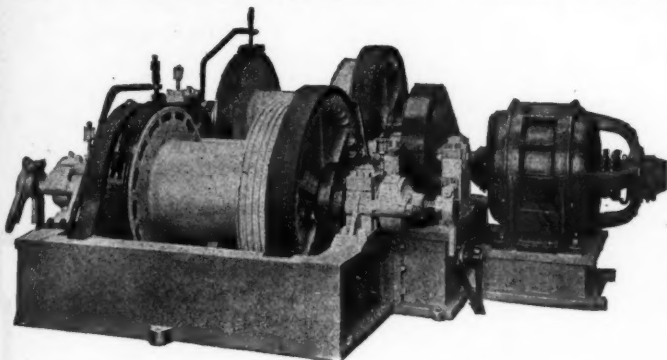


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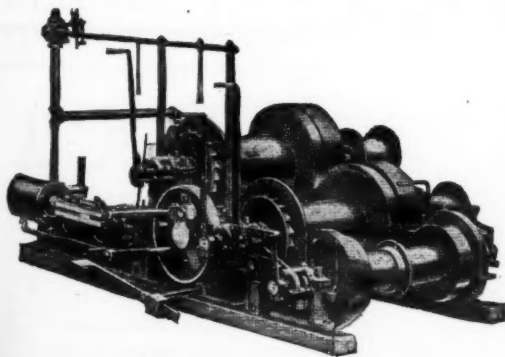
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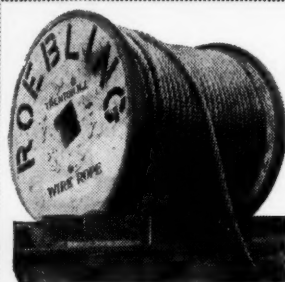
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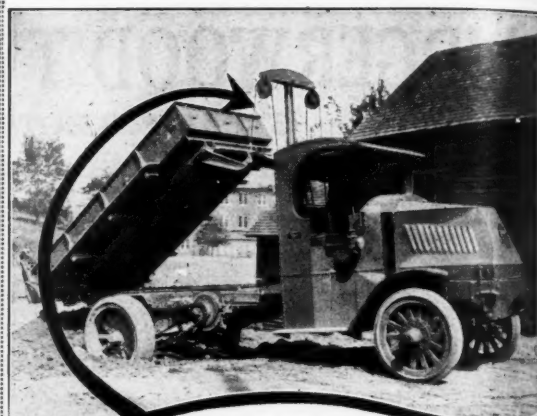


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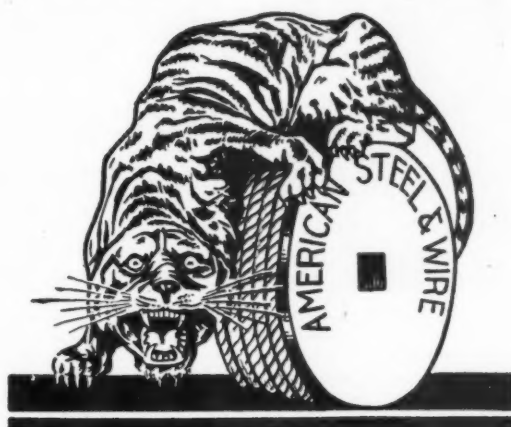
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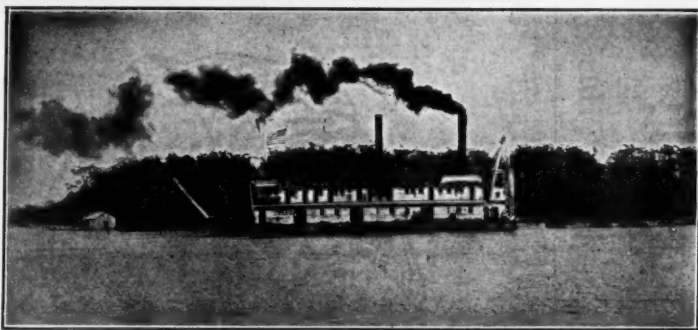
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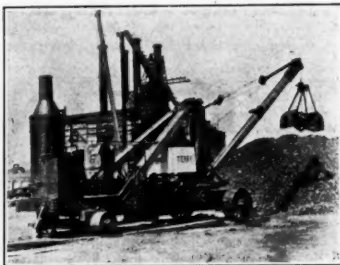
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240 Sycamore Street, RAVENNA, OHIO

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Builders of the highest type



CRANES



DERRICKS

TERRY

MANUFACTURING COMPANY
Grand Central Terminal
New York City
Plant—Kearny, Newark, N. J.

"Sail, sail thy best, ship of Democracy,
of value is thy freight, 'tis not the
Present only,

The Past is also stored in thee;

Thou holdest not the venture of thyself
alone, not of thy western continent
alone,

Earth's resume entire floats on thy keel
O Ship, is steadied by thy spars;

With thee Time voyages in trust, the an-
tecedent nations sink or swim with
thee,

With all Their ancient struggles, martyrs,
heroes, epics, wars, thou bear'st the
other continents,

Theirs, theirs as much as thine, the des-
tination-port triumphant;

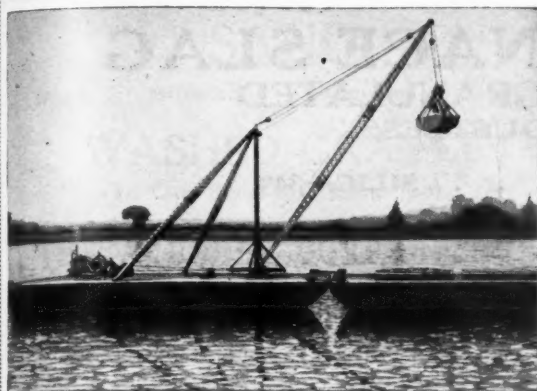
Steer, steer with good strong hand and
wary eye
O Helmsman, thou carriest great com-
panions."

Walt Whitman

The American Defense Society Inc.
116 East 24th Street, N. Y. C.

No. 18.

Space for this advertisement donated to the Society.



P & H QUALITY BARGE HOIST AND DERRICK EQUIPMENT

Ready for mounting on scow or barge, these P & H Derricks with electric, gas or oil engine drive are furnished complete with all necessary fittings.

The universal equipment for dredging, loading and unloading of vessels and scows;—for lighterage and wrecking purposes;—pile driving for dock piers and bridges;—sand dredging in river and harbor bottoms.

All-Steel construction—made in capacities from 5 tons up,—described in Bulletin H-501.

Indicate size of barge or scow to be used when writing for information.

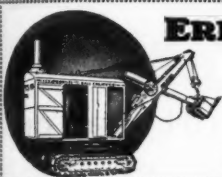
PAWLING & HARNISCHFEGER CO.

Established in 1884

3827 National Ave., Milwaukee, Wis.

Offices and Agents in Principal Cities

P & H HOISTS AND DERRICKS



ERIE Steam Shovels

For road grading; handling road materials with clamshell bucket; cellar and trench excavation; excavating sand and gravel, etc. We will be glad to send photos and data, showing just what the ERIE Shovel is doing on these classes of work.

Write for Bulletin "R"

ERIE STEAM SHOVEL CO.,

Formerly Ball Engine Co., Erie, Pa., U. S. A.
Builders of ERIE Shovels and Cranes

Contractors and Manufacturers

TIME CHECKS

We Make Them Promptly. Headquarters for Seals, Stock Certificates, Stencils, Steel Dies, Brass Signs, Enamel Plates, Memorial Plates, Church Seals and Pew Plates. Made on our Premises. Send for Catalogue.

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BALTIMORE, MD.

IMPROVED CRANES and DERRICKS

Setting entirely new standards of value in material-handling equipment.

Standard and special types for all purposes incorporating exclusive features. Design and workmanship backed by 50 years' engineering and manufacturing experience.

Lowest initial and operating expense.

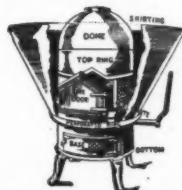
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(With or without External Gratings)

A portable machine, daily capacity 5 to 7 tons.



This dryer has a low first cost, is easily and cheaply operated and guaranteed dry sand.

The low cost makes it valuable for companies needing dry sand on two or more jobs at the same time, thereby eliminating the handling cost of one point only.

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For Contractors, Railroads,
Trolley Lines, Coal Companies,
Industrial Plants,
Foundries.

RAPID SAND AND GRAVEL WASHER

LIGHT, SIMPLE AND DURABLE WASHER

Takes the dirt out of the sand and at the same time saves, and makes money for you. Built of the very best materials, principal wearing parts of manganese steel.

It is good for a lifetime.



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Henry H. Meyer Co., BALTIMORE

Automatic
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DRYERS

For All
Materials

Economical Efficient Great Capacity

American Process Co., 68 William St.,

NEW YORK

DIGESTERS, ROTARY

DIRECT HEAT DRYERS STEAM JACKETED

CONTINUOUS STEEL SCREW PRESSES

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Especially suitable for drying all kinds of GRANULAR MATERIAL

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DRYERS · CALCINERS · COOLERS

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CRUSHED AND GRANULATED HARD AND DUSTLESS

IRON 37% SILICA 34%

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SALES OFFICE AND PLANT
COPPERHILL . . TENNESSEE

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Manufacturers of

High Grade Portland Cement



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We produce only one grade

THE HIGHEST

ALWAYS UNIFORM

Southern States Portland Cement Co.

Office and Mills—ROCKMART, GA.

CONCRETE



PERMANENT

MR. TAX-PAYER—YOU!

Do you want your county to spend YOUR good money on roads that will wear out before your bonded indebtedness is liquidated?

I SAY YOU DON'T.

What you want is a hard-surfaced road, with little cost for maintenance—a road that can be traveled in rain or snow, summer and winter. You want a **PERMANENT** road—that means **CONCRETE**!

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CHATTANOOGA, TENN.

Concrete Eliminates Maintenance

Architects and engineers specify concrete and reinforced concrete in the structures they are designing

Because—

It is thoroughly fireproof.

It gives stability and permanence.

Maintenance charges are eliminated.

It lends itself ideally to every class of construction, whether it be buildings, bridges, roads, dams, foundations or any class of engineering work.

For all kinds of concrete structures in the South.

Clinchfield Portland Cement

is being specified and used by the leading architects, engineers and contractors.



When you plan to build, specify Concrete. When you buy cement, select Clinchfield.

Clinchfield Portland Cement Corp.
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SAND

Bank Building Concrete Paving

WASHED GRAVEL

In Car, Scow and Barge Lots

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SAND AND GRAVEL

Petersburg Sand & Gravel Corporation
Petersburg, Virginia

CONCRETE, BUILDING AND PAVING SANDS

Giant Portland Cement

Clean Washed Gravel in all sizes

SAND—GRAVEL—BRICK

Washed Sand for Concrete, Roads and
Buildings, Brick and Plastering
Washed Gravel All Sizes
Building Brick

Shipments: Sand and Gravel from Petersburg, Va.
Brick from Waverly, Va.

FRIEND & CO. Inc. - River Street, Petersburg, Va.

CRUSHED LIMESTONE

Best for All Purposes

We manufacture all sizes of stone suitable for all
classes of road building and concrete work where only
a high-grade limestone is required.

Quarries opened up in 1912.

Capacity 4000 tons daily

Quarries:

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First National Bank Building, - ROANOKE, VA.

Asphalt Filler
Asphaltic Roadway Gravel
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AMERICAN LIMESTONE COMPANY
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Also facilities for shipping in
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BIRMINGHAM SLAG COMPANY
Birmingham, Ala.

CUMMER ASPHALT PLANTS

All Types and Sizes

THE F. D. CUMMER & SON CO.

CLEVELAND, OHIO.

Road Rollers, Road Machinery, Culverts and Supplies
THE GALION IRON WORKS & MFG. CO.

GALION, OHIO

ROAD BUILDING EQUIPMENT FOR EVERY REQUIREMENT
OF CONTRACTOR AND ROAD BUILDER

WHAT DO YOU NEED?

We want to furnish you Full Information on any Equipment in which you are interested
Write or telegraph for Catalogue and Prices



Elevators, conveyors, hoisting equipment

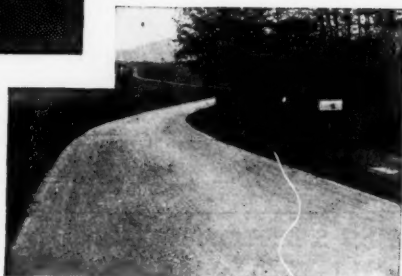
The GEORGE HAISS MFG. CO.,

139th St. and Canal Place, New York, N. Y.

Established 1892

Representatives throughout the world

NORTH CAROLINA



North Carolina State Project
No. 63—TEXACO Asphaltic
Concrete.

Pursue the State routes of North Carolina —

Past broad and flourishing fields of cotton and tobacco;

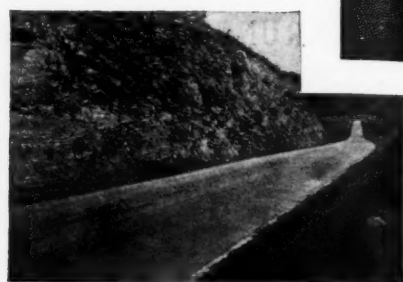
Through productive mining and lumbering regions;

Along swift rivers which furnish the tremendous power used in manufacturing;

Parallel to sections of the comprehensive railroad systems of the State;

Close to the ocean where you catch occasional glimpses of splendid harbors and extensive shipping operations;

AND



North Carolina State Project
No. 45—TEXACO Asphaltic
Concrete.

And finally to the great cities where are located the giant manufacturing enterprises of this State which are among the most prominent in the South.

First, you are impressed with the great size, wealth and beauty of North Carolina.

Then, with a little thought, comes appreciation of the indispensable part which its system of Highways plays in the successful development of this State.

In the highway system of North Carolina, many miles of TEXACO ASPHALT pavements form vital links.

TEXACO



The Texas Company

Asphalt Sales Dept., 17 Battery Pl., New York City



New York
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Richmond
Boston

Jacksonville
Atlanta

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Memphis

Chicago
Cleveland

Oklahoma City
Kansas City

Houston
Minneapolis

Dallas

**WHAT
FABRIC
IS****Made
For One
Purpose****Two
Types
Of Mesh****From One
To Finished
Product****Physical
Properties****Weld
Is Stronger
Than
The Wire****Stronger
Than Bars****NATIONAL ROAD FABRIC**

National Road Fabric is a wire fabric, designed and manufactured for reinforcing concrete roads. (See list of "styles" on page 14)

The fabric is made up either of

1. A series of main wires spaced and held (rigidly) equidistant apart by means of secondary wires which are welded (laced) to the former, at all intersections, by the electric welding process; or

2. A series of main and secondary wires, all spaced and held equidistant apart, and welded at all intersections, as above noted.

The main wires of the rectangular (1) type of mesh take care of load stresses, while the secondary wires take care of temperature stresses and at the same time act as "spacers" for the main wires; the square (2) type of mesh gives equal cross-sectional area in both directions.

We control every step in the manufacture of National Road Fabric—from ore to finished product. The fabric is manufactured from a very high-grade steel wire, which is cold-drawn in our own plant. This wire will develop an average tensile strength of 75,000 pounds per square inch; the average yield point is 40,000 pounds; the material will bend, cold, 180 degrees around one diameter without fracture.

The welding, or, more properly, the fusing of the secondary wires to the main wires is accomplished by means of electricity.

Exhaustive tests have proven that the welding process does not have a weakening effect upon the fabric, either longitudinally or transversely; on the other hand, tensile tests upon individual wires taken from pieces of fabric prove the weld to be the strongest part of the wire.

The advantages of National Road Fabric over bar reinforcing of an equal cross-sectional area are obvious; in the first place, the fabric is infinitely easier to handle and to place; in the second place, the fabric is much stronger than the bars, because the cold-drawn steel wires, of which the former is manufactured, have much better physical properties than hot-rolled bars of equal cross-sectional area.

To get the same resistance to tensile stresses, some state specifications require at least 50% more cross-sectional area when comparing alternate designs of bar and fabric reinforced concrete roads.

The tensile strength of the steel in a welded fabric is more fully developed in the concrete than is possible when bars are used. For example, four No. 3 wires have an area of .1866 square inches and a total circumference of 3.06 inches, whereas a 1½" bar has about the same surface of 3.06 inches, or bending surface. (See Testing Laboratory, page 17)

When National Road Fabric is used in the face of the concrete, it is

NATIONAL ROAD FABRIC

GENERAL practice in reinforced concrete construction limits the spacing of main steel members to the depth of the slab, or less, in order to get the best distribution of steel. In reinforced concrete road construction, this usually means a maximum space of 8" for steel members placed perpendicular to the center line of the road, which makes the use of bars almost economically prohibitive.

Furthermore, loose bars or even hand-tied bars may assume almost any position in the slab before final set of the concrete, whereas the rigid, flat sheet of fabric is certain to remain in the position where originally placed.

National Road Fabric is from 5% to 20% more "effective" than a woven wire fabric of the same total weight—because from 5% to 20% of the steel used in the manufacture of a woven wire fabric is wasted in ties or wraps, which are "ineffective" in resisting tensile stresses.

Another feature of National Steel Fabric is the fact that it can be furnished made up of wires having the same cross-sectional area in both directions—a woven fabric has certain limitations in this respect, due to the fact that only the lighter gauges of wire can be used for "weaving." Thus, National Steel Fabric obviates the necessity for laying two courses of reinforcement, when the design requires equal cross-sectional area in both directions.

National Road Fabric assures a more dense, perfectly banded concrete, free of voids—this is due to the fact that the numerous small wires offer less resistance to the free flow of the aggregate than either bars or the "ties" of a woven fabric.

National Road Fabric provides the greatest amount of strength for a given amount of steel, and, at the same time, minimizes the cost of transportation, handling, and placing the reinforcement.



One Truck With Driver and Two Men, Will Load and Haul a Surface of 100 Yards of 10x10 National Steel Fabric in 10 Hours

**ITS
ADVANTAGES****Bars are
Un economical****Woven Fabric
Ineffective****Equal Area
In Both
Directions****No Voids**

Get this Catalogue on Concrete Reinforcement

This catalog contains the very latest developments in reinforcing practices, the 1922 reinforced concrete road specifications adopted by several leading states, and valuable data on highway construction.

The uses and advantages of National Fabric for all reinforced concrete construction are fully explained.

Therefore, it will be of vital interest to every engineer and contractor.

**Get your copy today—a post card
will bring it**

National Steel Fabric Company

(Subsidiary of Pittsburgh Steel Co.)

702 Union Arcade, Pittsburgh, Pa.

"Cooperation Stimulates Service"

World's Largest Manufacturers of Welded Steel Fabric

NATIONAL STEEL CO. FABRIC CO.

Subsidiary of — PITTSBURGH STEEL CO.

UNION ARCADE BUILDING

PITTSBURGH, U.S.A.



CORRUGATED CULVERTS

Under Highways or Railroads, wherever dependable, lasting culverts are needed, use those made of anti-corrosive Toncan Metal. It endures! Toncan Culverts installed 14 years ago are still in excellent condition. Write for prices.

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STEAM JACKETED PUMP

The Standard of efficiency for pumping Heavy Crude Oils, Asphalts, Tars and all heavy viscous or bituminous products.

No Springs

No Valves

No Air Dome

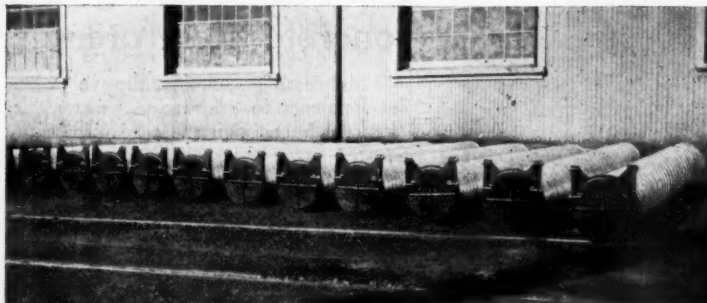
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KINNEY MANUFACTURING CO.

Boston, Mass.

New York, Philadelphia, Kansas City,
Chicago, San Francisco

Get acquainted with the Kinney line for Road Builders, Contractors, Municipalities.



Sensitive to the Slightest Change In Flow

—so that a difference in head of a few hundredths of an inch will automatically open or close them; so reliable that no maintenance is necessary; with seats

perfectly machined to insure watertightness, and actually cheaper to install than wooden or other types—

CALCO AUTOMATIC DRAINAGE GATES

are used extensively from 8 to 84 inches in connection with Armco Corrugated Iron Pipe on thousands of drainage installations. They automatically drain low-lying lands and serve as an instant protection against back flow due to flood or freshet.

There is a manufacturer in nearly every state, and in Canada, making genuine rust-resisting ARMCO CULVERTS and other products of Armco Ingot Iron such as flumes, siphons, tanks, road signs, roofing. Write for full information and nearest shipping point on products in which you are interested.

ARMCO CULVERT & FLUME MFRS. ASSN.
215 NORTH MICHIGAN AVE. CHICAGO



The Long, Even Trail to Road Economy

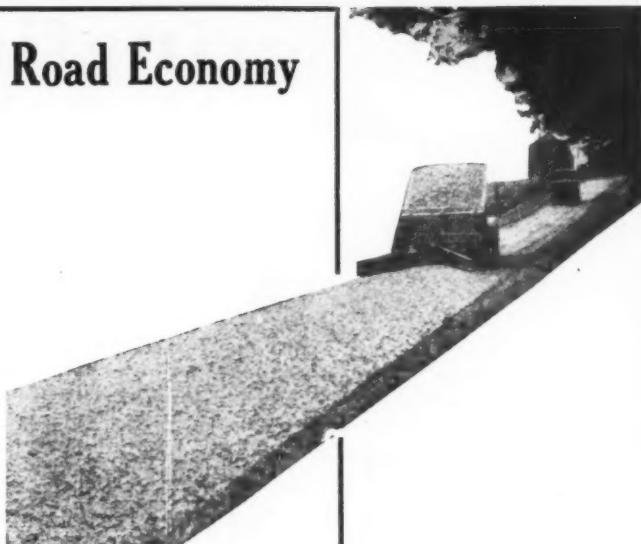
The Burch Gravel and Stone Spreader is designed to give greater efficiency at the least operating expense. Simplicity of construction, uniformity in spreading have proved a real help to road contractors.

The Burch spreader will deposit stone, slag, or gravel at required depth and width, at one half the cost of men. It pays for itself the first mile. After that, the profit is yours.

Contractors can get full and complete information from

The Burch Plow Works Company, Crestline, Ohio

We also make the Burch Stone and Gravel unloader,—a wonderful little machine for saving time and money in the loading and unloading of trucks, cars, etc.



The Tilting Drum Gives a Quicker, Cleaner Dump

THERE is really just one way to get a batch of concrete out of the drum into the barrow—quickly, easily, completely. That's to pour it out.

The Jaeger tilting drum gets rid of a batch as quickly and easily as emptying a bucket of water. It doesn't dip. It tilts and pours.—the only action for speed and economy. And those are the factors that spell profit on any concrete job.

Twelve thousand contractors use the Jaeger. They count on—and get—A MIX A MINUTE. Consider this in choosing your mixer. For every concrete job there's a Jaeger that exactly fills the bill. Write for our catalog today.

The Jaeger Machine Co.
115 Dublin Avenue
Columbus, Ohio.



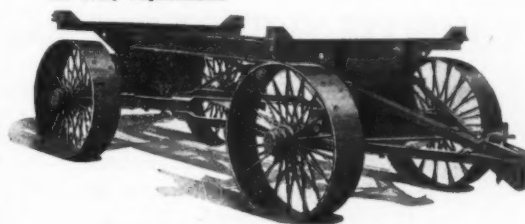
TRAILERS for factory, warehouse and dock use with industrial tractors. Special trucks designed and built to meet individual requirements.

LUMBER HAULING EQUIPMENT—Log wagons and carts, lumber buggies, planing mill trucks and dollies. A truck for every lumber mill requirement.

TRACTION WAGONS for heavy hauling of all kinds, with bed or platform to suit requirements. 5 to 25 tons capacity. Many used in lumbering and mining.

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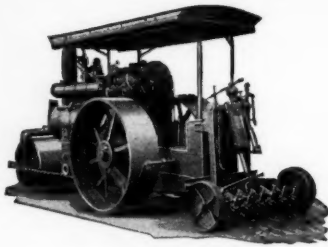
STEEL WHEELS, steel and wood axles, any size and capacity for every requirement.



Write us fully about your hauling problem and let us suggest the proper equipment.

ELECTRIC WHEEL COMPANY
5 Ohio St., QUINCY, ILL.

Kelly-Springfield Rollers



ROLLER WITH SCARIFIER

FOR MORE THAN 30 YEARS OUR ROAD AND STREET ROLLERS HAVE BEEN USED BY CONTRACTORS, CITIES, COUNTIES AND GOVERNMENTS IN EVERY PART OF THE WORLD, ESPECIALLY IN THE SOUTHERN STATES.

In Addition to ALL SIZES AND STYLES—2½ TO 20 TONS

Both Steam and Gasoline

WE BUILD

SPECIAL MAINTENANCE ROLLERS

And

SPUR-GEARED TANDEM

WRITE FOR CATALOG

THE BUFFALO-SPRINGFIELD ROLLER COMPANY
SPRINGFIELD, OHIO, U. S. A.

DUMP THE LOAD WITHOUT ANY STRAIN

THE JENNINGS PATENTED LEVER AND TAIL GATE are special features which put the Jennings Dump Bodies in a class to themselves.

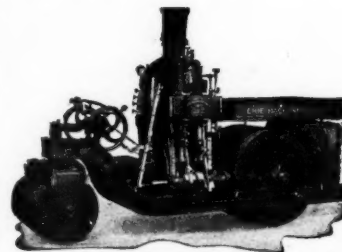
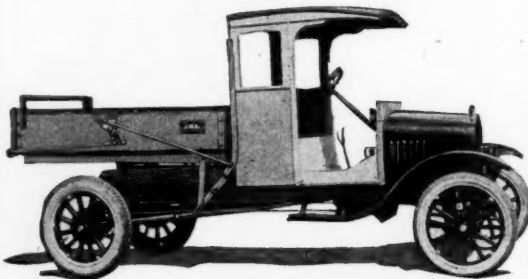
By pulling the lever forward, the body dumps; by lifting the lever the body is brought back to the loading position.

The lift required is about 30 lbs.

JENNINGS, the Ideal Body for Ford Trucks.

Write for prices

Jennings Automatic Dump Body, Inc.,
ROANOKE, VIRGINIA



“ERIE”
Tandem
Steam
Rollers

for
STRENGTH
DURABILITY
SIMPLICITY
and

ECONOMY of OPERATION and LONG LIFE

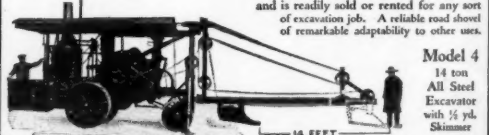
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ERIE MACHINE SHOPS
ERIE, PENNA., U. S. A.

The KEYSTONE is a highly versatile traction steam shovel with all the efficiency of specialized design, usable with three different interchangeable scoops

—Skimmer, Ditcher and Clamshell—for Road Grading, Trenching, Back Filling, Cellar Digging, Pit Mining, Loading, Unloading and Handling Materials. Can be equipped with electric motor drive for use in buildings.

Saves first cost, moving cost and upkeep, and is readily sold or rented for any sort of excavation job. A reliable road shovel of remarkable adaptability to other uses.



Model 4
14 ton
All Steel
Excavator
with ½ yd.
Skimmer

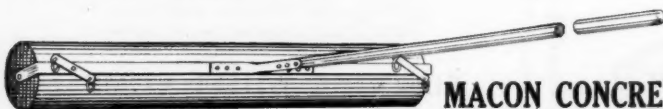
Keystone Driller Company, Beaver Falls, Pa.

170 Broadway, New York Monadnock Block, Chicago Joplin, Mo.

COMPLETE VICTORY FOR MACON CONCRETE ROLLER COMPANY

We take this method of notifying infringers of the Ashmore and Morgan patent and process granted July 16, 1918, that we will protect our patent rights and prosecute infringers. A decision rendered by the United States Circuit Court of Appeals, Fifth Circuit, New Orleans, La., February 24, 1922, holds our patent valid in every respect.

The roller we manufacture is the simplest, best and most economical means for finishing concrete pavements.



Leased on Reasonable terms

Write for further information.

MACON CONCRETE ROLLER CO. - MACON, GA.

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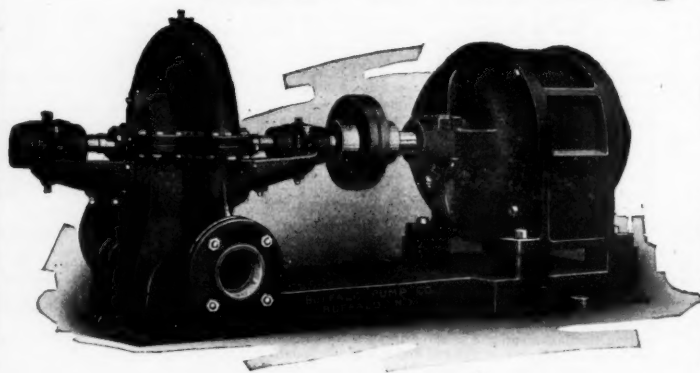


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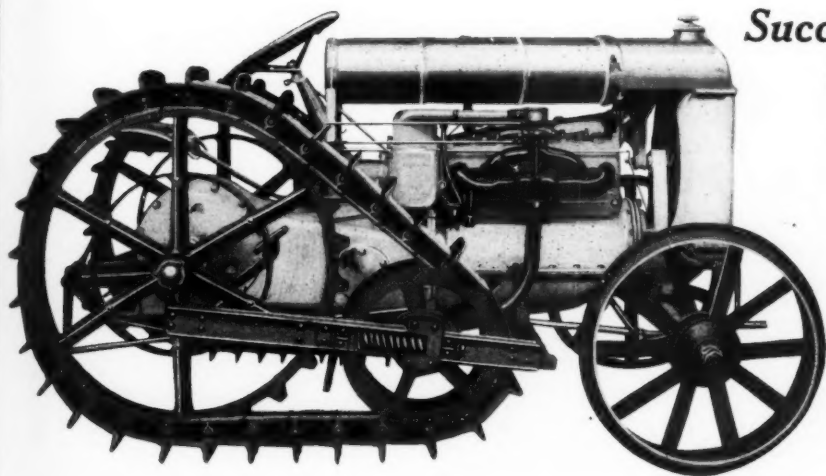
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